

Memorandum

TO: City of Auburn Hills Brownfield Redevelopment Authority

FROM: Brian Westhoff, Senior Project Manager - Group Leader, AKT Peerless

DATE: July 26, 2023

SUBJECT: Galloway Creek in Auburn Hills Michigan – 3rd Quarter 2023 Results

Galloway Creek Sampling

The City of Auburn Hills retained AKT Peerless to coordinate and conduct sampling of Galloway Creek from four locations within the city limits. One surface water and one sediment sample were collected from each location (refer to attached Figure).

Sample Locations

- Location A: One surface water and one sediment sample were taken from Galloway Creek north of 4470 Castlewood Drive.
- Location B: One surface water and one sediment sample were taken from Galloway Creek along Hole #12 at the Fieldstone Golf Club.
- Location C: One surface water and one sediment sample were taken from Galloway Creek west of 1361 N Opdyke Road.
- Location D: One surface water and one sediment sample were taken from Galloway Creek west of 1400 N Squirrel Road.

Analytical Results

On July 11th, 2023, four surface water and four sediment samples were collected and submitted to Quantum Laboratories, Inc. for analysis of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), herbicides, pesticides, Michigan 10 Metals, and hexavalent chromium.

Sediment Results:

- Chromium (total) detected at locations A, B, and C was in the trivalent chromium form. Hexavalent chromium was not detected in any of the sediment samples at concentrations exceeding Residential Cleanup Criteria. Therefore, the Chromium (total) is not a concern.
- Arsenic, Barium, Cadmium, Copper, Lead, and Zinc were above method detection limits but below Residential Cleanup Criteria from each of the four sediment samples.
- The four sediment samples were below method detection limits for the remaining VOCs, SVOCs, PCBs, herbicides, pesticides, and Michigan 10 Metals.

Surface Water Results:

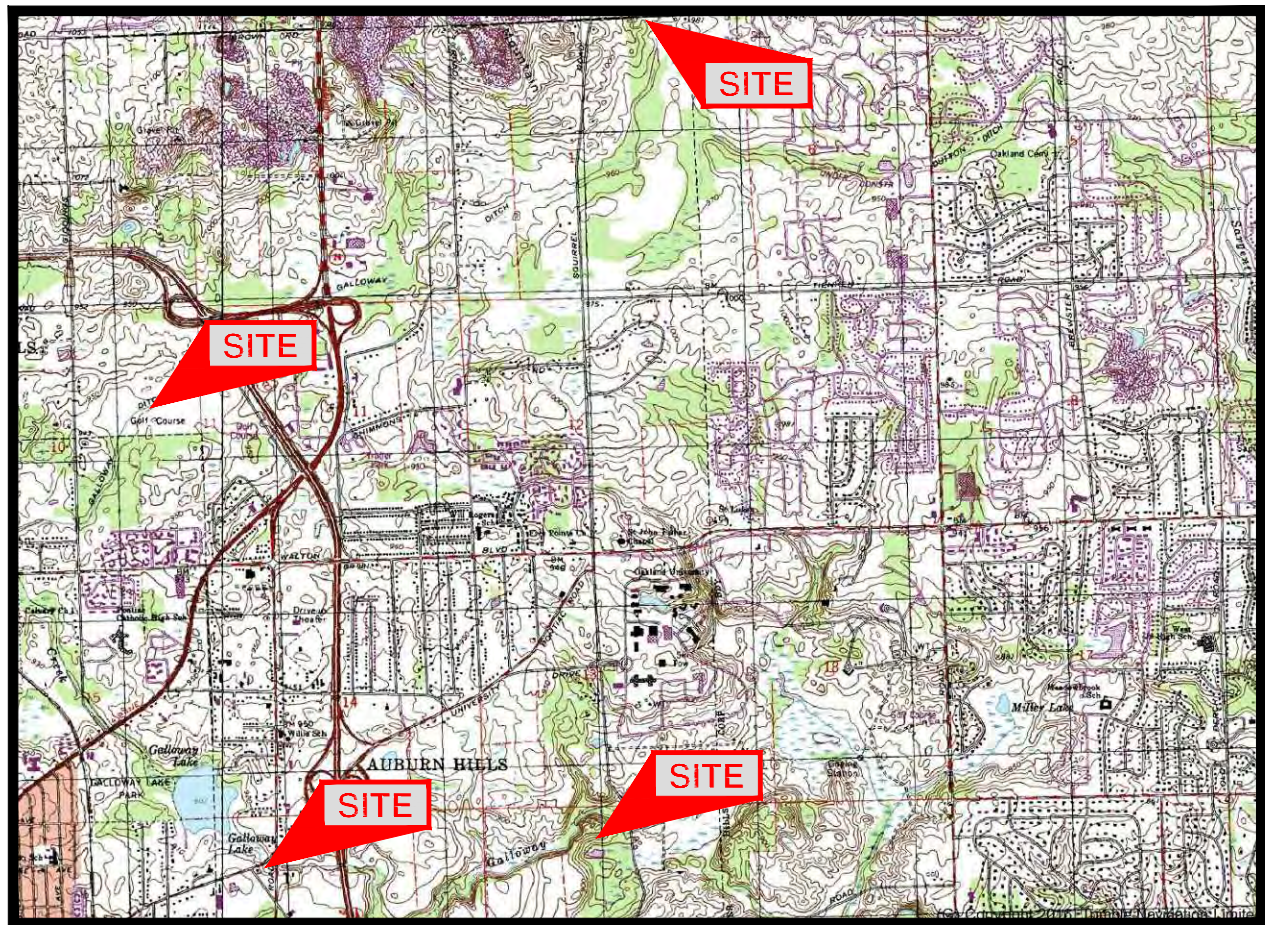
- Barium was above method detection limits but below Residential Cleanup Criteria at all four locations.

- Surface water samples were below method detection limits for the remaining VOCs, SVOCs, PCBs, herbicides, pesticides, Michigan 10 Metals, and hexavalent chromium.

Next Actions:

- Future sampling will be on a quarterly basis for 2023.

ROCHESTER QUADRANGLE
MICHIGAN - OAKLAND COUNTY
7.5 MINUTE SERIES (TOPOGRAPHIC)



T.3 N.-R.10 E.

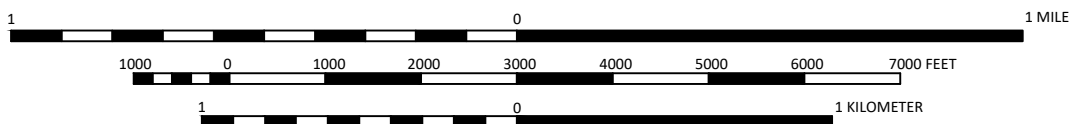


IMAGE TAKEN FROM 1997 U.S.G.S. TOPOGRAPHIC MAP

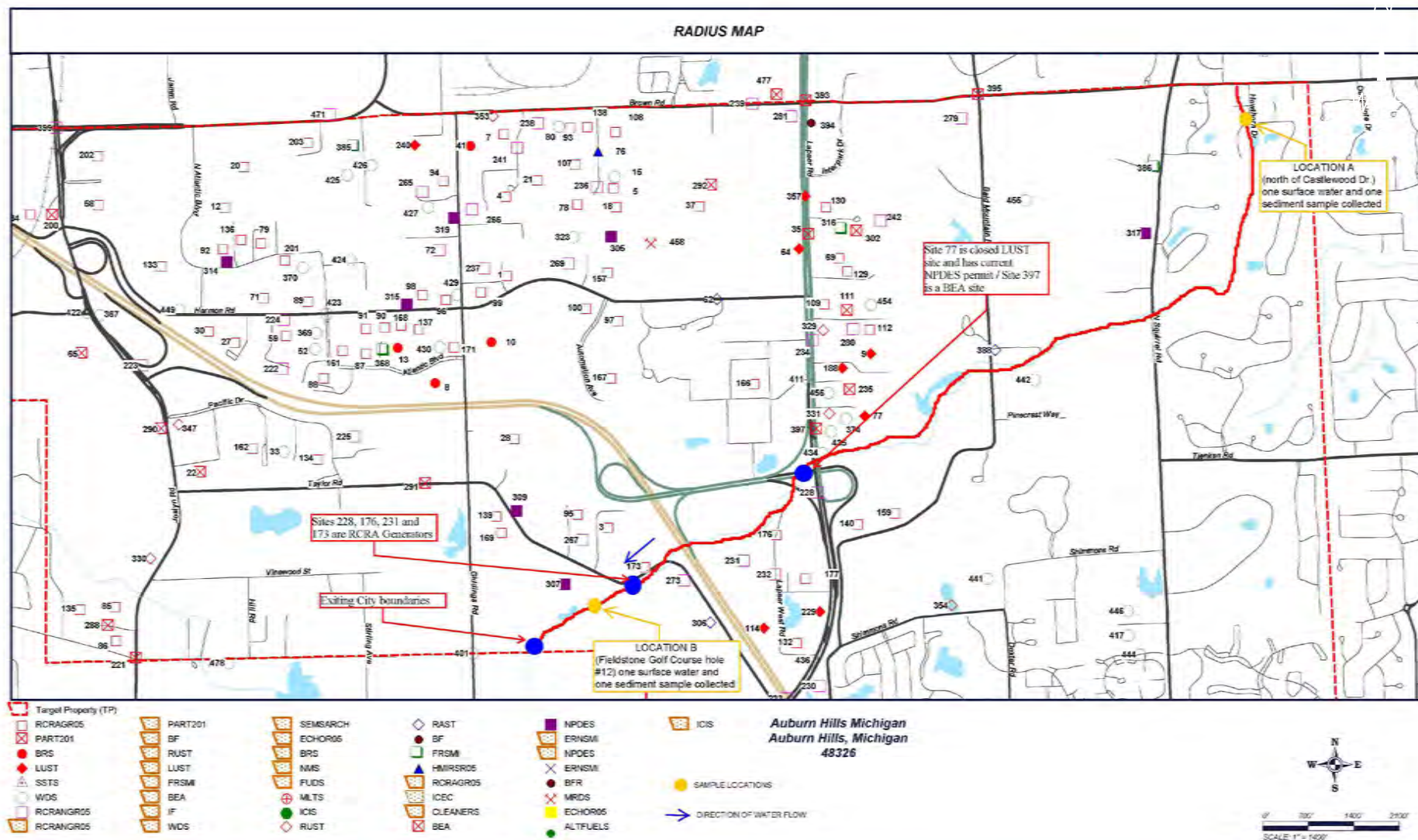
MICHIGAN
QUADRANGLE LOCATION



TOPOGRAPHIC LOCATION MAP
4470 CASTLEWOOD DRIVE, FIELDSTONE GOLF COURSE
HOLE #12, NEAR 1592 NORTH OPDYKE ROAD, AND NEAR
1400 NORTH SQUIRREL ROAD
AUBURN HILLS, MICHIGAN
PROJECT NUMBER: 13038F-4-20

DRAWN BY: SES
DATE: 04/05/2023

FIGURE 1



GeoSearch www.geo-search.com - phone: 866-396-0042 - fax: 512-472-9967

JOB #: 193674 - 8/9/2017

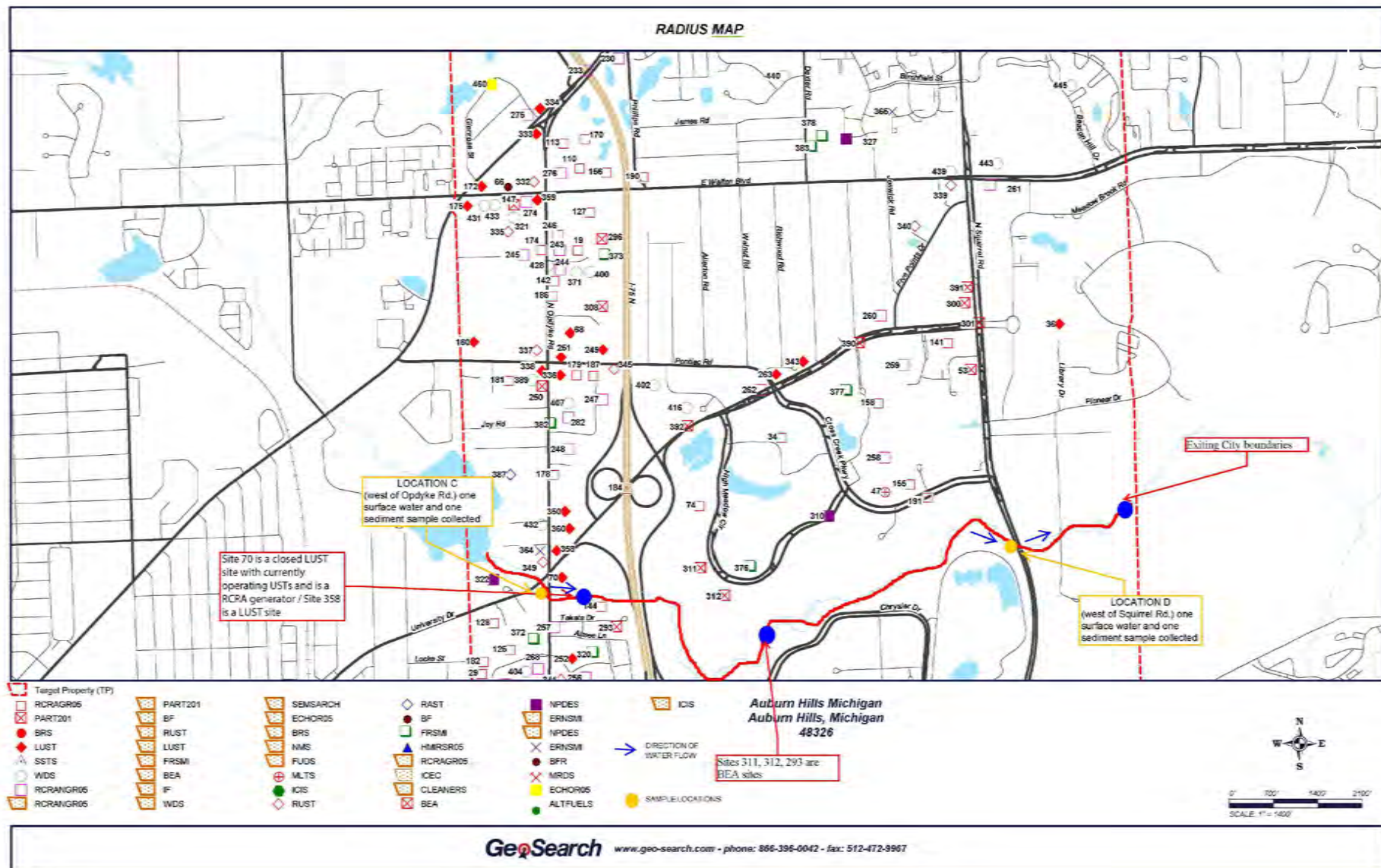
SAMPLE LOCATION MAP

NE CORNER OF LAPEER ROAD AND I-75 INTERCHANGE
AUBURN HILLS, MICHIGAN
PROJECT NUMBER: 13038F-4-20

DRAWN BY: MST
DATE: 06/08/2023

SCALE AS SHOWN

FIGURE 2



...JCE # 189574 - 8/30/17

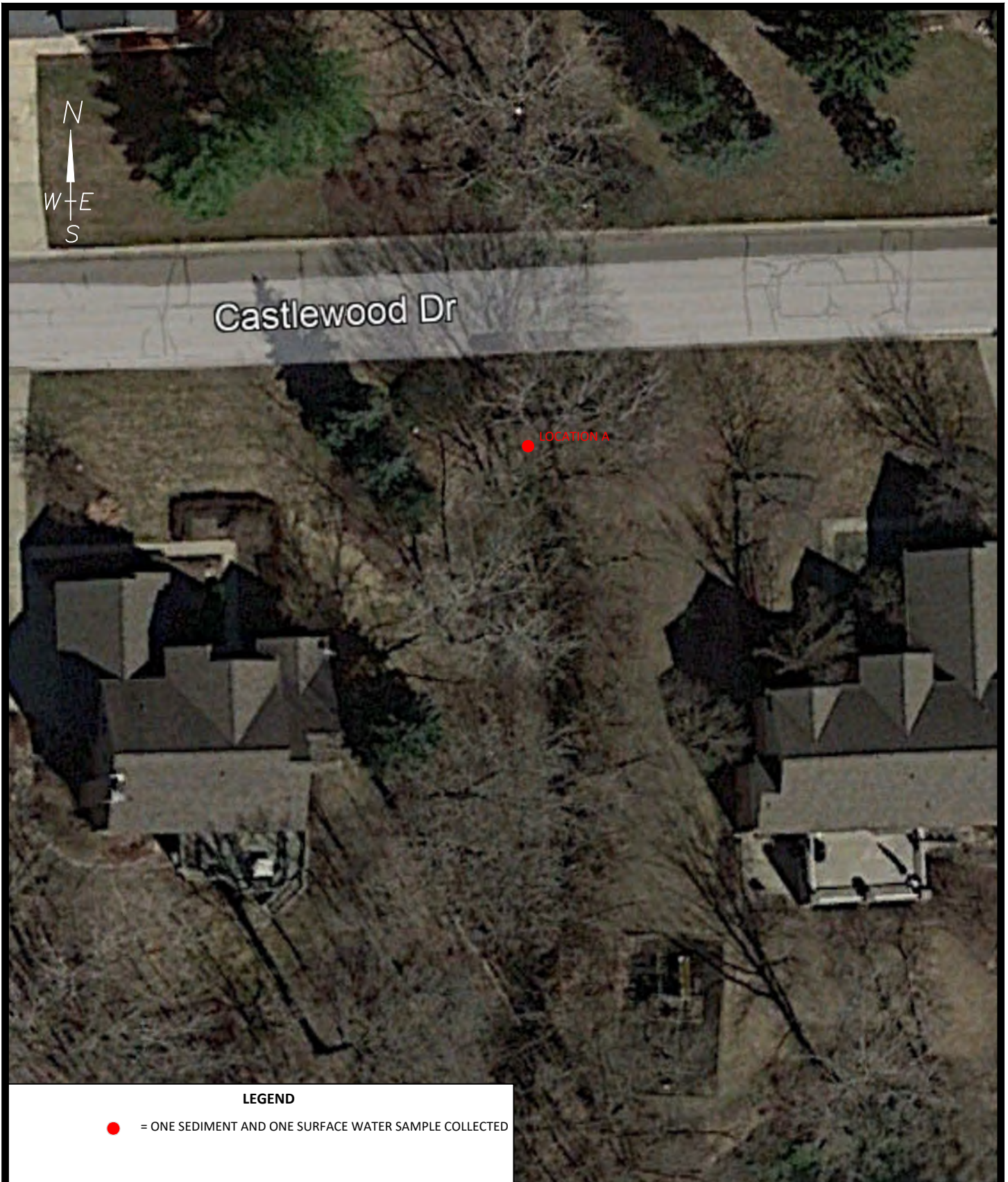
SAMPLE LOCATION MAP

NE CORNER OF LAPEER ROAD AND I-75 INTERCHANGE
AUBURN HILLS, MICHIGAN
PROJECT NUMBER: 13038F-4-20

DRAWN BY: MST
DATE: 06/08/2023

SCALE AS SHOWN

FIGURE 3



LEGEND

● = ONE SEDIMENT AND ONE SURFACE WATER SAMPLE COLLECTED



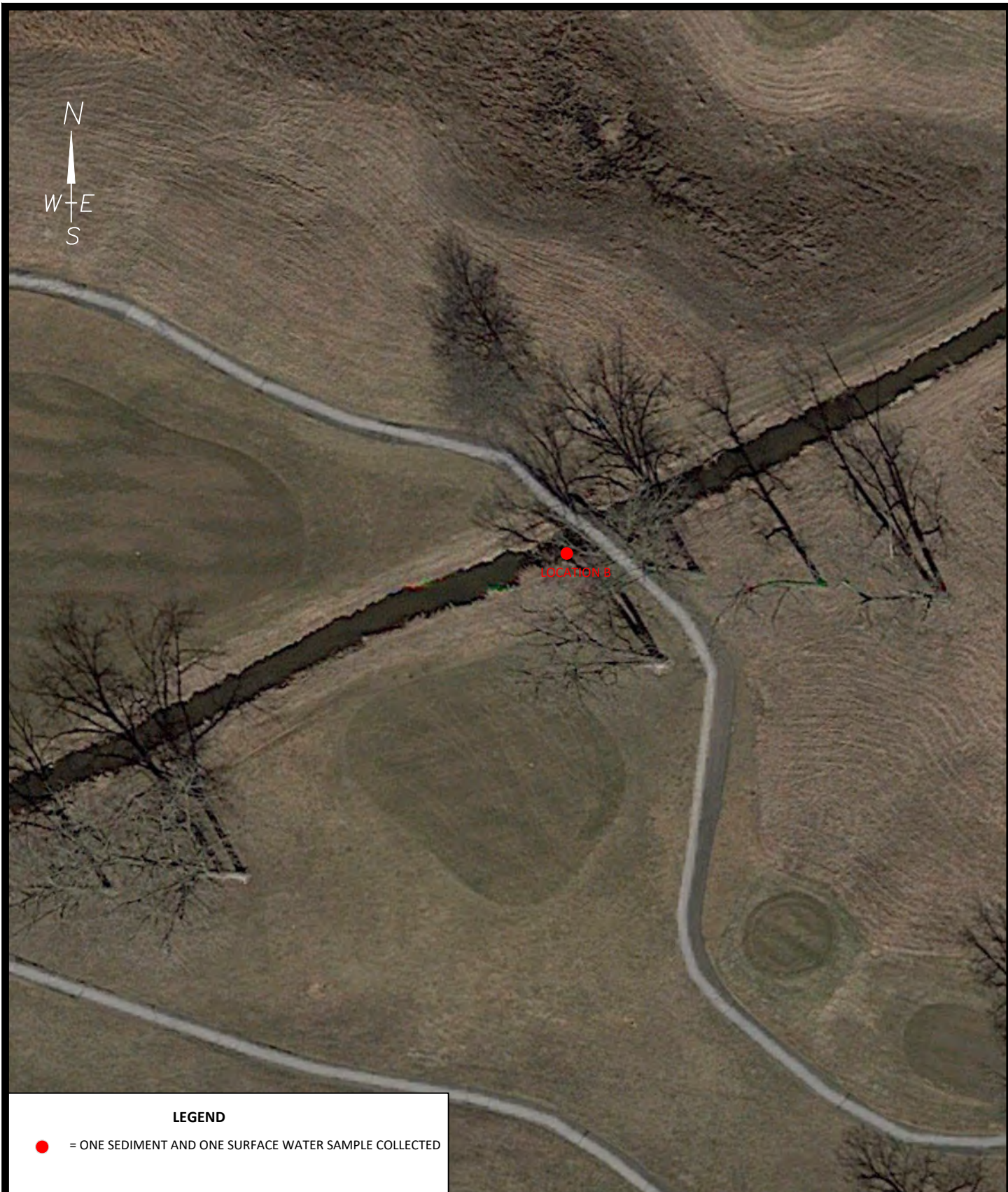
SAMPLE LOCATION MAP A

4470 CASTLEWOOD DRIVE
AUBURN HILLS, MICHIGAN
PROJECT NUMBER: 13038F-4-20

DRAWN BY: SES
DATE: 04/05/2023

0 15 30
SCALE: 1" = 30'

FIGURE 4



LEGEND

● = ONE SEDIMENT AND ONE SURFACE WATER SAMPLE COLLECTED



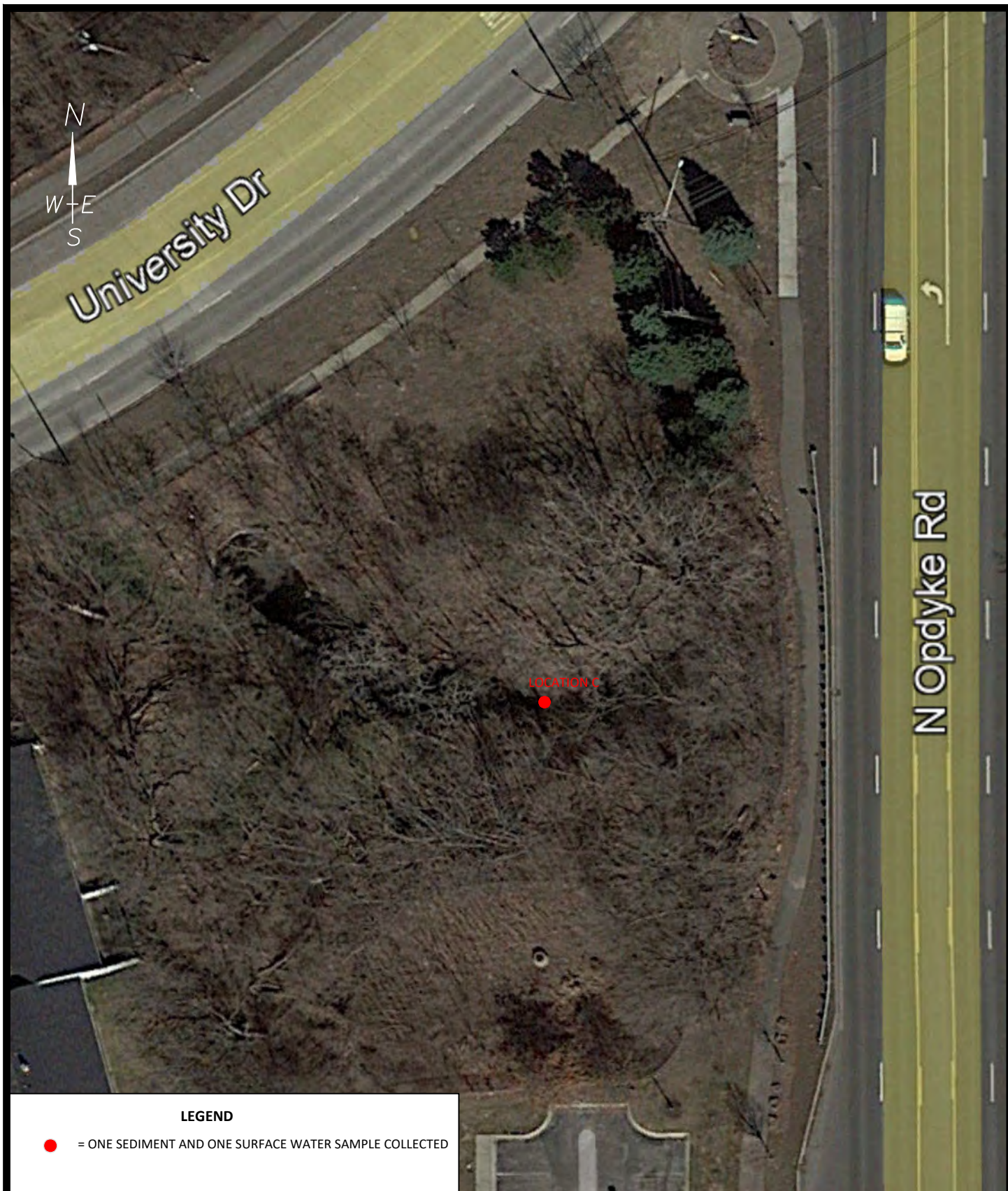
SAMPLE LOCATION MAP B

FIELDSTONE GOLF COURSE HOLE #12
AUBURN HILLS, MICHIGAN
PROJECT NUMBER: 13038F-4-20

DRAWN BY: SES
DATE: 04/10/2023

0 15 30
SCALE: 1" = 30'

FIGURE 5



SAMPLE LOCATION MAP C

NEAR 1592 NORTH OPDYKE ROAD
AUBURN HILLS, MICHIGAN
PROJECT NUMBER: 13038F-4-20

DRAWN BY: SES
DATE: 04/10/2023

0 15 30
SCALE: 1" = 30'

FIGURE 6



LEGEND

● = ONE SEDIMENT AND ONE SURFACE WATER SAMPLE COLLECTED



SAMPLE LOCATION MAP D

NEAR 1400 NORTH SQUIRREL ROAD
AUBURN HILLS, MICHIGAN
PROJECT NUMBER: 13038F-4-20

DRAWN BY: SES
DATE: 04/10/2023

0 15 30
SCALE: 1" = 30'

FIGURE 7

Table 1 - Summary of Sediment Analytical Results
Galloway Creek
Auburn Hills, Michigan
AKT Peerless Project No. 13038F-4-20

Parameters*	Chemical Abstract Service Number	Residential										Sample Location Collection Date	Location A	Location B	Location C	Location D
		Statewide Default Background Levels	Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels		07/11/23	07/11/23	07/11/23	07/11/23
													Surface	Surface	Surface	Surface
Metals		NA	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg			ug/Kg	ug/Kg	ug/Kg	ug/Kg
Arsenic	7440-38-2	5,800	4,600	4,600	NLV	NLV	NLV	NLV	7.2E+5	7,600	NA		3,090	2,130	2,140	1,410
Barium (B)	7440-39-3	75,000	1.3E+6	(G)	NLV	NLV	NLV	NLV	3.3E+8	3.7E+7	NA		180,000	90,800	14,500	45,900
Cadmium (B)	7440-43-9	1,200	6,000	(G,X)	NLV	NLV	NLV	NLV	1.7E+6	5.5E+5	NA		283	<200	<200	<200
Chromium, Total	7440-47-3	18,000 (total)	30,000	3,300	NLV	NLV	NLV	NLV	2.6E+5	2.5E+6	NA		20,900	3,510	12,300	<2000
Chromium III (B,H)	16065-83-1	18,000 (total)	1.0E+9 (D)	(G,X)	NLV	NLV	NLV	NLV	3.3E+8	7.9E+8	NA		NS	NS	NS	NS
Chromium VI	18540-29-9	NA	30,000	3,300	NLV	NLV	NLV	NLV	2.6E+5	2.5E+6	NA		<2,000	<2,000	<2,000	<2,000
Copper (B)	7440-50-8	32,000	5.8E+6	(G)	NLV	NLV	NLV	NLV	1.3E+8	2.0E+7	NA		18,100	4,680	27,100	3,240
Lead (B)	7439-92-1	21,000	7.0E+5	(G,X)	NLV	NLV	NLV	NLV	1.0E+8	4.0E+5	NA		14,600	5,060	23,800	1,880
Mercury, Total	7439-97-6	130	1,700	50 (M); 1.2	48,000	52,000	52,000	52,000	2.0E+7	1.6E+5	NA		<50	<50	<50	<50
Selenium (B)	7782-49-2	410	4,000	400	NLV	NLV	NLV	NLV	1.3E+8	2.6E+6	NA		<200	<200	<200	<200
Silver (B)	7440-22-4	1,000	4,500	100 (M); 27	NLV	NLV	NLV	NLV	6.7E+6	2.5E+6	NA		<100	<100	<100	<100
Zinc (B)	7440-66-6	47,000	2.4E+6	(G)	NLV	NLV	NLV	NLV	1.7E+8		NA		65,600	9,800	29,400	9,400
PCBs ug/Kg																
PCB, Aroclor 1016	12674-11-2	NA	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<100	<100	<100	<100
PCB, Aroclor 1221	11104-28-2	NA	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<100	<100	<100	<100
PCB, Aroclor 1232	11141-16-5	NA	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<100	<100	<100	<100
PCB, Aroclor 1242	53469-21-9	NA	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<100	<100	<100	<100
PCB, Aroclor 1248	12672-29-6	NA	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<100	<100	<100	<100
PCB, Aroclor 1254	11097-69-1	NA	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<100	<100	<100	<100
PCB, Aroclor 1260	11096-82-5	NA	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<100	<100	<100	<100
PCB, Aroclor 1262	37324-23-5	NA	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		NS	NS	NS	NS
PCB, Aroclor 1268	11100-14-4	NA	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		NS	NS	NS	NS
Polychlorinated biphenyls (PCBs) (I,T)	1336-36-3	NA	NLL	NLL	3.0E+6	2.4E+5	7.9E+6	7.9E+6	5.2E+6	(T)	NA		<700	<700	<700	<700
Organochlorine Herbicides																
2,4-DB	94826	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS		<200	<200	<200	<200
2,4,5-T	93721	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS		<500	<500	<500	<500
Dalapon	75-99-0	NA	4,000	NA	NLV	NLV	NLV	NLV	ID	1.9E+7	5.9E+7		<500	<500	<500	<500
Dicamba	1918-00-9	NA	4,400	NA	NA	NLV	NLV	NLV	ID	3.4E+6	NA		<50	<50	<50	<50
2,4-Dichlorophenoxyacetic acid	94-75-7	NA	1,400	4,400	NLV	NLV	NLV	NLV	6.7E+9	2.5E+6	NA		<200	<200	<200	<200
Dichloroprop	15165670	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS		<50	<50	<50	<50
Dinoseb	88-85-7	NA	300	200 (M); 43	NLV	NLV	NLV	NLV	2.7E+8	66,000 (DD)	1.4E+5		<200	<200	<200	<200
2-Methyl-4-chlorophenoxyacetic acid	94-74-6	NA	390	NA	NLV	NLV	NLV	NLV	ID	2.3E+5	NA		<5,000	<5,000	<5,000	<5,000
4,4'-Methylene-bis-2-chloroaniline (MBOCA)	101-14-4	NA	NLL	NLL	NLV	NLV	NLV	NLV	8.4E+7	6,800	NA		<5,001	<5,001	<5,001	<5,001
Methyl parathion	298-00-0	NA	46	NA	NLV	NLV	NLV	NLV	ID	56,000	NA		<5,002	<5,002	<5,002	<5,002
Metolachlor	51218-45-2	NA	4,800	300	NLV	NLV	NLV	NLV	ID	1.5E+6 (C,DD)	4.4E+5		<5,003	<5,003	<5,003	<5,003
Metribuzin	21087-64-9	NA	3,600	NA	ID	ID	ID	ID	ID	9.6E+6	NA		<5,004	<5,004	<5,004	<5,004
Oxamyl	23135-22-0	NA	4,000	NA	NLV	NLV	NLV	NLV	ID	8.6E+6	NA		<5,005	<5,005	<5,005	<5,005
Pendimethalin	40487-42-1	NA	1.1E+6	NA	NLV	NLV	NLV	NLV	ID	4.6E+7	NA		<5,006	<5,006	<5,006	<5,006
Picloram	2/1/1918	NA	10,000	920	NLV	NLV	NLV	NLV	ID	1.6E+7	NA		<5,007	<5,007	<5,007	<5,007
Prometon	1610-18-0	NA	4,900	NA	NLV	NLV	NLV	NLV	ID	5.0E+6	NA		<5,008	<5,008	<5,008	<5,008
Propachlor	1918-16-7	NA	1,900	NA	NLV	NLV	NLV	NLV	ID	2.9E+6	NA		<5,009	<5,009	<5,009	<5,009
MCPP	7085190	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS		<5,000	<5,000	<5,000	<5,000
Silvex (2,4,5-TP)	93-72-1	NA	3,600	2,200	NLV	NLV	NLV	NLV	ID	1.7E+6	NA		<300	<300	<300	<300
Aldrin	309-00-2	NA	NLL	NLL	1.3E+6	58,000	58,000	58,000	6.4E+5	1,000	NA		<20	<20	<20	<20
Chlordane (I)	57-74-9	NA	NLL	NLL	1.1E+7	1.2E+6	1.2E+6	1.2E+6	3.1E+7	31,000	NA		<30	<30	<30	<30
4-4'-DDD	72-54-8	NA	NLL	NLL	NLV	NLV	NLV	NLV	4.4E+7	95,000	NA		<20	<20	<20	<20
4-4'-DDE	72-55-9	NA	NLL	NLL	NLV	NLV	NLV	NLV	3.2E+7	45,000	NA		<20	<20	<20	<20
4-4'-DDT	50-29-3	NA	NLL	NLL	NLV	NLV	NLV	NLV	3.2E+7	57,000	NA		<20	<20	<20	<20
Dieldrin	60-57-1	NA	NLL	NLL	1.4E+5	19,000	19,000	19,000	6.8E+5	1,100	NA		<20	<20	<20	<20
Endosulfan I	959-98-8	NA	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<20	<20	<20	<20
Endosulfan II	33213-65-9	NA	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<20	<20	<20	<20
Endosulfan (I)	115-29-7	NA	NLL	NLL	ID	ID	ID	ID	ID	1.4E+6	NA		<40	<40	<40	<40
Endosulfan Sulfate	1031078	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS		<20	<20	<20	<20
Endrin	72-20-8	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	65,000	NA		<20	<20	<20	<20
Endrin aldehyde	7421934	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS		<20	<20	<20	<20
Heptachlor	76-44-8	NA	NLL	NLL	3.5E+5	62,000	62,000	62,000	2.4E+6	5,600	NA		<20	<20	<20	<20
Heptachlor epoxide	1024-57-3	NA	NLL	NLL	NLV	NLV	NLV	NLV	1.2E+6	3,100	NA		<20	<20	<20	<20
Hexachlorobutadiene (C-46)	87-68-3	NA	26,000	91	1.3E+5	1.3E+5	1.3E+5	1.3E+5	1.4E+8	1.0E+5	3.5E+5		<50	<50	<50	<50
alpha-Hexachlorocyclohexane	319-84-6	NA	18	ID	30,000	12,000	22,000	25,000	1.7E+6	2,600	NA		<10	<10	<10	<10
beta-Hexachlorocyclohexane	319-85-7	NA	37	ID	NLV	NLV	NLV	NLV	5.9E+6	5,400	NA		<20	<20	<20	<20
delta-Hexachlorocyclohexane	319868	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS		<20	<20	<20	<20
Lindane	58-89-9	NA	20 (M); 7.0	20 (M); 1.1	ID	ID	ID	ID	ID	8,300	NA		<20	<20	<20	<20
Methoxychlor	72-43-5	NA	16,000	NA	ID	ID	ID	ID	ID	1.9E+6	NA		<50	<50	<50	<50
Semivolatiles																
Aniline	62-53-3	NA	1,100	330 (M); 80	NLV	NLV	NLV	NLV	6.7E+7	3.3E+5	4.5E+6		<330	<330	<330	<330
Azobenzene	103-33-3	NA	4,200	ID	6.1E+6	6.3E+5	6.3E+5	6.3E+5	1.0E+8	1.4E+5	NA		<200	<200	<200	<200
Benzidine	92-87-5	NA	1,000 (M); 6.0	1,000 (M); 6.0	NLV	NLV	NLV	NLV	46,000	1,000 (M); 23	NA		<1,000	<1,000	<1,000	<1,000

Table 1 - Summary of Sediment Analytical Results
Galloway Creek
Auburn Hills, Michigan
AKT Peerless Project No. 13038F-4-20

Parameters*	Chemical Abstract Service Number	Statewide Default Background Levels	Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels	Sample Location	Location A	Location B	Location C	Location D		
												Collection Date	07/11/23	07/11/23	07/11/23	07/11/23		
												Depth	Surface	Surface	Surface	Surface		
Benzyl alcohol	100-51-6	NA	2.0E+5	NA	NLV	NLV	NLV	NLV	3.3E+11	3.2E+8 (C)	5.8E+6		<3,300	<3,300	<3,300	<3,300	<3,300	
4-Bromophenyl Phenylether	101-55-3	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<330	<330	<330	<330	<330	
Butyl benzyl phthalate	85-68-7	NA	2.2E+6 (C)	1.2E+5 (X)	NLV	NLV	NLV	NLV	4.7E+10	3.6E+7 (C)	3.1E+5		<330	<330	<330	<330	<330	
Carbazole	86-74-8	NA	9,400	1,100	NLV	NLV	NLV	NLV	6.2E+7	5.3E+5	NA		<330	<330	<330	<330	<330	
4-Chloroaniline	106-47-8	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS	NLS		<330	<330	<330	<330	<330	
4-Chloro-3-methylphenol	59-50-7	NA	5,800	280	NLV	NLV	NLV	NLV	ID	4.5E+6	NA		<280	<280	<280	<280	<280	
Bis(2-chloroethoxy)methane	111-91-1	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<330	<330	<330	<330	<330	
bis(2-Chloroethyl)ether (I)	111-44-4	NA	100	100 (M); 20	8,300	3,800	3,800	3,800	9.4E+6	13,000	2.2E+6		<100	<100	<100	<100	<100	
Bis(2-chloroisopropyl) Ether	108-60-1	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<330	<330	<330	<330	<330	
beta-Chloronaphthalene	91-58-7	NA	6.2E+5	NA	ID	ID	ID	ID	ID	5.6E+7	NA		<330	<330	<330	<330	<330	
2-Chlorophenol	95-57-8	NA	900	360	4.3E+5	9.6E+5	9.6E+5	9.6E+5	1.2E+9	1.4E+6	1.9E+7		<330	<330	<330	<330	<330	
4-Chlorophenyl Phenylether	7005-72-3	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<330	<330	<330	<330	<330	
Dibenzofuran	132-64-9	NA	ID	1,700	2.0E+6	1.3E+5	1.3E+5	1.3E+5	6.7E+6	ID	NA		<330	<330	<330	<330	<330	
3,3'-Dichlorobenzidine	91-94-1	NA	2,000 (M); 28	2,000 (M); 7.4	NLV	NLV	NLV	NLV	6.5E+6	6,600	NA		<2,000	<2,000	<2,000	<2,000	<2,000	
2,4-Dichlorophenol	120-83-2	NA	1,500	330 (M); 220	NLV	NLV	NLV	NLV	5.1E+9	6.6E+5 (DD)	1.8E+6		<330	<330	<330	<330	<330	
Diethyl phthalate	84-66-2	NA	1.1E+5	2,200	NLV	NLV	NLV	NLV	3.3E+9	1.7E+8 (C)	7.4E+5		<330	<330	<330	<330	<330	
2,4-Dimethylphenol	105-67-9	NA	7,400	7,600	NLV	NLV	NLV	NLV	4.7E+9	1.1E+7	NA		<330	<330	<330	<330	<330	
Dimethyl phthalate	131-11-3	NA	1.5E+6 (C)	NA	NLV	NLV	NLV	NLV	3.3E+9	1.0E+9 (C,D)	7.9E+5		<330	<330	<330	<330	<330	
Di-n-butyl phthalate	84-74-2	NA	9.6E+5 (C)	11,000	NLV	NLV	NLV	NLV	3.3E+9	2.7E+7 (C)	7.6E+5		<330	<330	<330	<330	<330	
2,4-Dinitrophenol	51-28-5	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<830	<830	<830	<830	<830	
2,4-Dinitrotoluene	121-14-2	NA	430	NA	NLV	NLV	NLV	NLV	1.6E+7	48,000	NA		<330	<330	<330	<330	<330	
2,6-Dinitrotoluene	606-20-2	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<330	<330	<330	<330	<330	
Di-n-octyl phthalate	117-84-0	NA	1.0E+8	ID	NLV	NLV	NLV	NLV	3.1E+10	6.9E+6	1.4E+8		<330	<330	<330	<330	<330	
bis(2-Ethylhexyl)phthalate	117-81-7	NA	NLL	NLL	NLV	NLV	NLV	NLV	7.0E+8	2.8E+6	1.0E+7		<330	<330	<330	<330	<330	
Hexachlorobenzene (C-66)	118-74-1	NA	1,800	350	41,000	17,000	17,000	17,000	6.8E+6	8,900	NA		<330	<330	<330	<330	<330	
Hexachlorocyclopentadiene (C-56)	77-47-4	NA	3.2E+5	ID	30,000	50,000	50,000	50,000	1.3E+7	2.3E+6 (C)	7.2E+5		<330	<330	<330	<330	<330	
Hexachloroethane	67-72-1	NA	430	1,800 (X)	40,000	5.5E+5	9.3E+5	9.3E+5	2.3E+8	2.3E+5	NA		<300	<300	<300	<300	<300	
Isophorone	78-59-1	NA	15,000	26,000 (X)	NLV	NLV	NLV	NLV	1.2E+10	4.8E+6 (C)	2.4E+6		<330	<330	<330	<330	<330	
2-Methyl-4,6-dinitrophenol	534-52-1	NA	830 (M); 400	NA	NLV	NLV	NLV	NLV	1.3E+8	79,000	NA		<830	<830	<830	<830	<830	
Methylphenol, 2-	95-48-7	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<330	<330	<330	<330	<330	
Methylphenol, 3- and 4-	MEPH1314	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<330	<330	<330	<330	<330	
Methylphenols (I)	1319-77-3	NA	7,400	1,000 (M); 600	NLV	NLV	NLV	NLV	6.7E+9	1.1E+7	NA		<1,000	<1,000	<1,000	<1,000	<1,000	
2-Nitroaniline	88-74-4	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<830	<830	<830	<830	<830	
3-Nitroaniline	99-09-2	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<830	<830	<830	<830	<830	
4-Nitroaniline	100-01-6	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<830	<830	<830	<830	<830	
Nitrobenzene (I)	98-95-3	NA	330 (M); 68	3,600 (X)	91,000	54,000	54,000	54,000	4.7E+7	1.0E+5	4.9E+5		<330	<330	<330	<330	<330	
2-Nitrophenol	88-75-5	NA	400	ID	NLV	NLV	NLV	NLV	ID	6.3E+5	NA		<330	<330	<330	<330	<330	
4-Nitrophenol	100-02-7	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<830	<830	<830	<830	<830	
N-Nitrosodimethylamine	62-75-9	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<330	<330	<330	<330	<330	
n-Nitroso-di-n-propylamine	621-64-7	NA	330 (M); 100	NA	NLV	NLV	NLV	NLV	1.6E+6	1,200	1.5E+6		<330	<330	<330	<330	<330	
N-Nitrosodiphenylamine	86-30-6	NA	5,400	NA	NLV	NLV	NLV	NLV	2.2E+9	1.7E+6	NA		<330	<330	<330	<330	<330	
Pentachlorophenol	87-86-5	NA	22	(G,X)	NLV	NLV	NLV	NLV	1.0E+8	90,000	NA		<20	<20	<20	<20	<20	
Phenol	108-95-2	NA	88,000	9,000	NLV	NLV	NLV	NLV	4.0E+10	4.0E+7 (C,DD)	1.2E+7		<330	<330	<330	<330	<330	
Pyridine (I)	110-86-1	NA	400	NA	1,100	8,200	40,000	97,000	2.3E+8	2.3E+5 (C)	37,000		<330	<330	<330	<330	<330	
2,4,5-Trichlorophenol	95-95-4	NA	39,000	NA	NLV	NLV	NLV	NLV	2.3E+10	2.3E+7	NA		<330	<330	<330	<330	<330	
2,4,6-Trichlorophenol	88-06-2	NA	2,400	330 (M); 100	NLV	NLV	NLV	NLV	1.0E+9	7.1E+5	NA		<330	<330	<330	<330	<330	
Semivolatiles, PNAs																		
Acenaphthene	83-32-9	NA	3.0E+5	8,700	1.9E+8	8.1E+7	8.1E+7	8.1E+7	1.4E+10	4.1E+7	NA		<330	<330	<330	<330	<330	
Acenaphthylene	208-96-8	NA	5,900	ID	1.6E+6	2.2E+6	2.2E+6	2.2E+6	2.3E+9	1.6E+6	NA		<330	<330	<330	<330	<330	
Anthracene	120-12-7	NA	41,000	ID	1.0E+9 (D)	1.4E+9	1.4E+9	1.4E+9	6.7E+10	2.3E+8	NA		<330	<330	<330	<330	<330	
Benzo(a)anthracene (Q)	56-55-3	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	20,000	NA		<330	<330	<330	<330	<330	
Benzo(a)pyrene (Q)	50-32-8	NA	NLL	NLL	NLV	NLV	NLV	NLV	1.5E+6	2,000	NA		<330	<330	<330	<330	<330	
Benzo(b)fluoranthene (Q)	205-99-2	NA	NLL	NLL	ID	ID	ID	ID	ID	20,000	NA		<330	<330	<330	<330	<330	
Benzo(g,h,i)perylene	191-24-2	NA	NLL	NLL	NLV	NLV	NLV	NLV	8.0E+8	2.5E+6	NA		<330	<330	<330	<330	<330	
Benzo(k)fluoranthene (Q)	207-08-9	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	2.0E+5	NA		<330	<330	<330	<330	<330	
Chrysene (Q)	218-01-9	NA	NLL	NLL	ID	ID	ID	ID	ID	2.0E+6	NA		<330	<330	<330	<330	<330	
Dibenzo(a,h)anthracene (Q)	53-70-3	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	2,000	NA		<330	<330	<330	<330	<330	
Fluoranthene	206-44-0	NA	7.3E+5	5,500	1.0E+9 (D)	7.4E+8	7.4E+8	7.4E+8	9.3E+9	4.6E+7	NA		<330	<330	<330	<330	<330	
Fluorene	86-73-7	NA	3.9E+5	5,300	5.8E+8	1.3E+8	1.3E+8	1.3E+8	9.3E+9	2.7E+7	NA		<330	<330	<330	<330	<330	
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	20,000	NA		<330	<330	<330	<330	<330	
2-Methylnaphthalene	91-57-6	NA	57,000	4,200	2.7E+6	1.5E+6	1.5E+6	1.5E+6	6.7E+8	8.1E+6	NA		<330	<330	<330	<330	<330	
Phenanthrene	85-01-8	NA	56,000	2,100	2.8E+6	1.6E+5	1.6E+5	1.6E+5	6.7E+6	1.6E+6	NA		<330	<330	<330	<330	<330	
Pyrene	129-00-0	NA	4.8E+5	ID	1.0E+9 (D)	6.5E+8	6.5E+8	6.5E+8	6.7E+9	2.9E+7	NA		<330	<330	<330	<330	<330	
Toxaphene																		
Toxaphene	8001-35-2	NA	24,000	8,200	NLV	NLV	NLV	NLV	9.7E+6	20,000	NA		<170	<170	<170	<170	<170	

Table 1 - Summary of Sediment Analytical Results
Galloway Creek
Auburn Hills, Michigan
AKT Peerless Project No. 13038F-4-20

			Residential													
Parameters*	Chemical Abstract Service Number	Statewide Default Background Levels	Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels	Sample Location	Location A	Location B	Location C	Location D
* (Refer to detailed laboratory report for method reference data)												Collection Date	07/11/23	07/11/23	07/11/23	07/11/23
												Depth	Surface	Surface	Surface	Surface
Volatiles																
Acetone (I)	67-64-1	NA	15,000	34,000	2.9E+8 (C)	1.3E+8	1.3E+8	1.9E+8	3.9E+11	2.3E+7	1.1E+8		<1,000	<1,000	<1,000	<1,000
Acrylonitrile (I)	107-13-1	NA	100 (M); 52	100 (M); 40	6,600	5,000	5,100	10,000	4.6E+7	16,000	8.3E+6		NS	NS	NS	NS
Benzene (I)	71-43-2	NA	100	4,000 (X)	1,600	13,000	34,000	79,000	3.8E+8	1.8E+5	4.0E+5		<50	<50	<50	<50
Bromobenzene (I)	108-86-1	NA	550	NA	3.1E+5	4.5E+5	4.5E+5	4.5E+5	5.3E+8	5.4E+5	7.6E+5		<100	<100	<100	<100
Bromochloromethane	74-97-5	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<100	<100	<100	<100
Bromodichloromethane	75-27-4	NA	1,600 (W)	ID	1,200	9,100	9,700	19,000	8.4E+7	1.1E+5	1.5E+6		<100	<100	<100	<100
Bromoform	75-25-2	NA	1,600 (W)	ID	1.5E+5	9.0E+5	9.0E+5	9.0E+5	2.8E+9	8.2E+5	8.7E+5		<100	<100	<100	<100
Bromomethane	74-83-9	NA	200	100	860	11,000	57,000	1.4E+5	3.3E+8	3.2E+5	2.2E+6		<200	<200	<200	<200
2-Butanone (MEK) (I)	78-93-3	NA	2.6E+5	44,000	5.4E+7 (C)	2.9E+7	2.9E+7	3.5E+7	6.7E+10	1.2E+8 (C,DD)	2.7E+7		<750	<750	<750	<750
n-Butylbenzene	104-51-8	NA	1,600	ID	ID	ID	ID	ID	2.0E+9	2.5E+6	1.0E+7		<50	<50	<50	<50
sec-Butylbenzene	135-98-8	NA	1,600	ID	ID	ID	ID	ID	4.0E+8	2.5E+6	1.0E+7		<50	<50	<50	<50
tert-Butylbenzene (I)	98-06-6	NA	1,600	ID	ID	ID	ID	ID	6.7E+8	2.5E+6	1.0E+7		<50	<50	<50	<50
Carbon disulfide (I,R)	75-15-0	NA	16,000	ID	76,000	1.3E+6	7.9E+6	1.9E+7	4.7E+10	7.2E+6 (C,DD)	2.8E+5		<250	<250	<250	<250
Carbon tetrachloride	56-23-5	NA	100	760 (X)	190	3,500	12,000	28,000	1.3E+8	96,000	3.9E+5		<50	<50	<50	<50
Chlorobenzene (I)	108-90-7	NA	2,000	500	1.2E+5	7.7E+5	9.9E+5	2.1E+6	4.7E+9	4.3E+6 (C)	2.6E+5		<50	<50	<50	<50
Chloroethane	75-00-3	NA	8,600	22,000 (X)	2.9E+6 (C)	3.0E+7	1.2E+8	2.8E+8	6.7E+11	2.6E+6 (C)	9.5E+5		<250	<250	<250	<250
Chloroform	67-66-3	NA	1,600 (W)	7,000	7,200	45,000	1.2E+5	2.7E+5	1.3E+9	1.2E+6	1.5E+6		<50	<50	<50	<50
Chloromethane (I)	74-87-3	NA	5,200	ID	2,300	40,000	4.1E+5	1.0E+6	4.9E+9	1.6E+6 (C)	1.1E+6		<250	<250	<250	<250
2-Chlorotoluene (I)	95-49-8	NA	3,300	ID	2.7E+5	1.2E+6	2.9E+6	6.3E+6	4.7E+9	4.5E+6 (C)	5.0E+5		<50	<50	<50	<50
4-Chlorotoluene (I)	106-43-4	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<50	<50	<50	<50
Dibromochloromethane	124-48-1	NA	1,600 (W)	ID	3,900	24,000	24,000	33,000	1.3E+8	1.1E+5	6.1E+5		<100	<100	<100	<100
Dibromochloropropane	96-12-8	NA	10 (M); 4.0	ID	220	260	260	260	5.6E+5	4,400 (C)	1,200		<10	<10	<10	<10
Dibromomethane	74-95-3	NA	1,600	NA	ID	ID	ID	ID	ID	2.5E+6 (C)	2.0E+6		<250	<250	<250	<250
1,2-Dichlorobenzene	95-50-1	NA	14,000	280	1.1E+7 (C)	3.9E+7	3.9E+7	5.2E+7	1.0E+11	1.9E+7 (C)	2.1E+5		<100	<100	<100	<100
1,3-Dichlorobenzene	541-73-1	NA	170	680	26,000	79,000	79,000	1.1E+5	2.0E+8	2.0E+5 (C)	1.7E+5		<100	<100	<100	<100
1,4-Dichlorobenzene	106-46-7	NA	1,700	360	19,000	77,000	77,000	1.1E+5	4.5E+8	4.0E+5	NA		<100	<100	<100	<100
Dichlorodifluoromethane	75-71-8	NA	95,000	ID	9.0E+5	5.3E+7	5.5E+8	1.4E+9	3.3E+12	5.2E+7 (C)	1.0E+6		<250	<250	<250	<250
1,1-Dichloroethane	75-34-3	NA	18,000	15,000	2.3E+5	2.1E+6	5.9E+6	1.4E+7	3.3E+10	2.7E+7 (C)	8.9E+5		<50	<50	<50	<50
1,2-Dichloroethane (I)	107-06-2	NA	100	7,200 (X)	2,100	6,200	11,000	26,000	1.2E+8	91,000	1.2E+6		<50	<50	<50	<50
cis-1,2-Dichloroethylene	156-59-2	NA	1,400	12,000	22,000	1.8E+5	4.2E+5	9.9E+5	2.3E+9	2.5E+6 (C)	6.4E+5		<50	<50	<50	<50
trans-1,2-Dichloroethylene	156-60-5	NA	2,000	30,000 (X)	23,000	2.8E+5	8.3E+5	2.0E+6	4.7E+9	3.8E+6 (C)	1.4E+6		<50	<50	<50	<50
1,1-Dichloroethylene (I)	75-35-4	NA	140	2,600	62	1,100	5,300	13,000	6.2E+7	2.0E+5	5.7E+5		<50	<50	<50	<50
1,2-Dichloropropane (I)	78-87-5	NA	100	4,600 (X)	4,000	25,000	50,000	1.1E+5	2.7E+8	1.4E+5	5.5E+5		<50	<50	<50	<50
1,3-Dichloropropane	142-28-9	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<50	<50	<50	<50
2,2-Dichloropropane	594-20-7	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<50	<50	<50	<50
1,1-Dichloropropene	563-58-6	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<50	<50	<50	<50
1,3-Dichloropropene	542-75-6	NA	170	180 (X)	1,000	18,000	68,000	1.6E+5	7.8E+8	10,000	6.2E+5		<50	<50	<50	<50
cis-1,3-Dichloropropylene	10061-01-5	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		NS	NS	NS	NS
trans-1,3-Dichloropropylene	10061-02-6	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		NS	NS	NS	NS
Ethylbenzene (I)	100-41-4	NA	1,500	360	87,000	7.2E+5	1.0E+6	2.2E+6	1.0E+10	2.2E+7 (C)	1.4E+5		<50	<50	<50	<50
Ethylene dibromide	106-93-4	NA	20 (M); 1.0	110 (X)	670	1,700	1,700	3,300	1.4E+7	92	8.9E+5		<20	<20	<20	<20
2-Hexanone	591-78-6	NA	20,000	ID	9.9E+5	1.1E+6	1.1E+6	1.4E+6	2.7E+9	3.2E+7 (C)	2.5E+6		<2,500	<2,500	<2,500	<2,500
Isopropyl benzene	98-82-8	NA	91,000	3,200	4.0E+5 (C)	1.7E+6	1.7E+6	2.8E+6	5.8E+9	2.5E+7 (C)	3.9E+5		<250	<250	<250	<250
4-Methyl-2-pentanone (MIBK) (I)	108-10-1	NA	36,000	ID	3.7E+7 (C)	4.5E+7	4.5E+7	6.7E+7	1.4E+11	5.6E+7 (C)	2.7E+6		<2,500	<2,500	<2,500	<2,500
Methylene chloride	75-09-2	NA	100	30,000 (X)	45,000	2.1E+5	5.9E+5	1.4E+6	6.6E+9	1.3E+6	2.3E+6		<250	<250	<250	<250
Methyl-tert-butyl ether (MTBE)	1634-04-4	NA	800	1.4E+5 (X)	9.9E+6 (C)	2.5E+7	3.9E+7	8.7E+7	2.0E+11	1.5E+6	5.9E+6		<250	<250	<250	<250
Naphthalene	91-20-3	NA	35,000	730	2.5E+5	3.0E+5	3.0E+5	3.0E+5	2.0E+8	1.6E+7	NA		<250	<250	<250	<250
n-Propylbenzene (I)	103-65-1	NA	1,600	ID	ID	ID	ID	ID	1.3E+9	2.5E+6	1.0E+7		<100	<100	<100	<100
Styrene	100-42-5	NA	2,700	2,100 (X)	2.5E+5	9.7E+5	9.7E+5	1.4E+6	5.5E+9	4.0E+5	5.2E+5		<50	<50	<50	<50
1,1,1,2-Tetrachloroethane	630-20-6	NA	1,500	ID	6,200	36,000	54,000	1.0E+5	4.2E+8	4.8E+5 (C)	4.4E+5		<100	<100	<100	<100
1,1,2,2-Tetrachloroethane	79-34-5	NA	170	1,600 (X)	4,300	10,000	10,000	14,000	5.4E+7	53,000	8.7E+5		<50	<50	<50	<50
Tetrachloroethylene	127-18-4	NA	100	1,200 (X)	11,000	1.7E+5	4.8E+5	1.1E+6	2.7E+9	2.0E+5 (C)	88,000		<50	<50	<50	<50
Tetrahydrofuran	109-99-9	NA	1,900	2.2E+5 (X)	1.3E+6	1.3E+7	6.7E+7	1.6E+8	3.9E+11	2.9E+6	1.2E+8		<1,000	<1,000	<1,000	<1,000
Toluene (I)	108-88-3	NA	16,000	5,400	3.3E+5 (C)	2.8E+6	5.1E+6	1.2E+7	2.7E+10	5.0E+7 (C)	2.5E+5		<100	<100	<100	<100
1,2,3-Trichlorobenzene	87-61-6	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		<250	<250	<250	<250
1,2,4-Trichlorobenzene	120-82-1	NA	4,200	5,900 (X)	9.6E+6 (C)	2.8E+7	2.8E+7	2.8E+7	2.5E+10	9.9E+5 (DD)	1.1E+6		<250	<250	<250	<250
1,1,1-Trichloroethane	71-55-6	NA	4,000	1,800	2.5E+5	3.8E+6	1.2E+7	2.8E+7	6.7E+10	5.0E+8 (C)	4.6E+5		<50	<50	<50	<50
1,1,2-Trichloroethane	79-00-5	NA	100	6,600 (X)	4,600	17,000	21,000	44,000	1.9E+8	1.8E+5	9.2E+5		<50	<50	<50	<50
Trichloroethylene	79-01-6	NA	100	4,000 (X)	1,000	11,000	25,000	57,000	1.3E+8	1.1E+5 (DD)	5.0E+5		<50	<50	<50	<50
Trichlorofluoromethane	75-69-4	NA	52,000	NA	2.8E+6 (C)	9.2E+7	6.3E+8	1.5E+9	3.8E+12	7.9E+7 (C)	5.6E+5		<100	<100	<100	<100
1,2,3-Trichloropropane	96-18-4	NA	840	NA	4,000	9,200	9,200	11,000								

Table 2: Summary of Surface Water Analytical Results
Galloway Creek
Auburn Hills, Michigan
AKT Peerless Project No. 13038F-4-20

Residential							Sample Location	Location A	Location B	Location C	Location D
Parameters	Chemical Abstract Service Number	Drinking Water Criteria	Groundwater Surface Water Interface Criteria	Groundwater Volatilization to Indoor Air Inhalation Criteria	Water Solubility	Flammability and Explosivity Screening Level	Collection Date	07/11/23	07/11/23	07/11/23	07/11/23
(Refer to detailed laboratory report for method reference data)							Screen Depth	Surface	Surface	Surface	Surface
Metals											
Arsenic	7440-38-2	10 (A)	10	NLV	NA	ID		<5.0	<5.0	<5.0	<5.0
Barium (B)	7440-39-3	2,000 (A)	(G)	NLV	NA	ID		113	201	215	235
Cadmium (B)	7440-43-9	5.0 (A)	(G,X)	NLV	NA	ID		<1.0	<1.0	<1.0	<1.0
Chromium, Total	7440-47-3	100 (A)	11	NLV	NA	ID		<5.0	<5.0	<5.0	<5.0
Chromium VI	18540-29-9	100 (A)	11	NLV	NA	ID		<10	<10	<10	<10
Copper (B)	7440-50-8	1,000 (E)	(G)	NLV	NA	ID		<4.0	<4.0	<4.0	<4.0
Lead (B)	7439-92-1	4.0 (L)	(G,X)	NLV	NA	ID		<3.0	<3.0	<3.0	<3.0
Mercury, Total	7439-97-6	2.0 (A)	0.0013	56 (S)	56	ID		<0.20	<0.20	<0.20	<0.20
Selenium (B)	7782-49-2	50 (A)	5.0	NLV	NA	ID		<5.0	<5.0	<5.0	<5.0
Silver (B)	7440-22-4	34	0.2 (M); 0.06	NLV	NA	ID		<0.20	<0.20	<0.20	<0.20
Zinc (B)	7440-66-6	2,400	(G)	NLV	NA	ID		<50	<50	<50	<50
PCBs											
PCB, Aroclor 1016	12674-11-2	NLV	NLV	NLV	NLV	NLV		<0.20	<0.20	<0.20	<0.20
PCB, Aroclor 1221	11104-28-2	NLV	NLV	NLV	NLV	NLV		<0.20	<0.20	<0.20	<0.20
PCB, Aroclor 1232	11141-16-5	NLV	NLV	NLV	NLV	NLV		<0.20	<0.20	<0.20	<0.20
PCB, Aroclor 1242	53469-21-9	NLV	NLV	NLV	NLV	NLV		<0.20	<0.20	<0.20	<0.20
PCB, Aroclor 1248	12672-29-6	NLV	NLV	NLV	NLV	NLV		<0.20	<0.20	<0.20	<0.20
PCB, Aroclor 1254	11097-69-1	NLV	NLV	NLV	NLV	NLV		<0.20	<0.20	<0.20	<0.20
PCB, Aroclor 1260	11096-82-5	NLV	NLV	NLV	NLV	NLV		<0.20	<0.20	<0.20	<0.20
PCB, Aroclor 1262	37324-23-5	NLV	NLV	NLV	NLV	NLV		NS	NS	NS	NS
PCB, Aroclor 1268	11100-14-4	NLV	NLV	NLV	NLV	NLV		NS	NS	NS	NS
Polychlorinated biphenyls (PCBs) (J,T)	1336-36-3	0.5 (A)	0.2 (M); 2.6E-5	45 (S)	44.7	ID		<2.0	<2.0	<2.0	<2.0
Herbicides											
2,4-DB	94826	NLV	NLV	NLV	NLV	NLV		<10	<10	<10	<10
2,4,5-T	93765	NLV	NLV	NLV	NLV	NLV		<10	<10	<10	<10
Dalapon	75-99-0	200 (A)	NA	NLV	5.02E+8	ID		<10	<10	<10	<10
Dicamba	1918-00-9	220	NA	NLV	4.5E+6	ID		<1.0	<1.0	<1.0	<1.0
2,4-Dichlorophenoxyacetic acid	94-75-7	70 (A)	220	NLV	6.80E+5	ID		<10	<10	<10	<10
Dichloroprop	15165670	NLV	NLV	NLV	NLV	NLV		<10	<10	<10	<10
Dinoseb	88-85-7	7.0 (A)	1.0 (M); 0.48	NLV	52,000	ID		<1.0	<1.0	<1.0	<1.0
MCPA	94746	7.3	NA	NLV	9.24E+05	ID		<100	<100	<100	<100
MCPP	7085190	NLV	NLV	NLV	NLV	NLV		<250	<250	<250	<250
Silvex (2,4,5-TP)	93-72-1	50 (A)	30	NLV	1.40E+5	ID		<30	<30	<30	<30
Pesticides, Chlorinated											
Aldrin	309-00-2	0.098	0.01 (M); 8.7E-6	180 (S)	180	ID		<0.010	<0.010	<0.010	<0.010
Chlordane (J)	57-74-9	2.0 (A)	2.0 (M); 0.00025	56 (S)	56	ID		<0.050	<0.050	<0.050	<0.050
4-4'-DDD	72-54-8	9.1	NA	NLV	90	ID		<0.1	<0.1	<0.1	<0.1
4-4'-DDE	72-55-9	4.3	NA	NLV	120	ID		<0.1	<0.1	<0.1	<0.1
4-4'-DDT	50-29-3	3.6	0.02 (M); 1.1E-5	NLV	25	NA		<0.020	<0.020	<0.020	<0.020
Dieldrin	60-57-1	0.11	0.02 (M); 6.5E-6	200 (S)	195	ID		<0.020	<0.020	<0.020	<0.020
Endosulfan I	959-98-8	NLV	NLV	NLV	NLV	NLV		<0.015	<0.015	<0.015	<0.015
Endosulfan II	33213-65-9	NLV	NLV	NLV	NLV	NLV		<0.015	<0.015	<0.015	<0.015
Endosulfan (I)	115-29-7	44	0.03 (M); 0.029	ID	510	ID		<0.03	<0.03	<0.03	<0.03
Endosulfan sulfate	1031078	NLV	NLV	NLV	NLV	NLV		<0.050	<0.050	<0.050	<0.050
Endrin	72-20-8	2.0 (A)	ID	NLV	250	ID		<0.020	<0.020	<0.020	<0.020
Endrin aldehyde	7421934	NLV	NLV	NLV	NLV	NLV		<0.020	<0.020	<0.020	<0.020
Heptachlor	76-44-8	0.4 (A)	0.01 (M); 0.0018	180 (S)	180	ID		<0.010	<0.010	<0.010	<0.010
Heptachlor epoxide	1024-57-3	0.2 (A)	ID	NLV	200	ID		<0.010	<0.010	<0.010	<0.010
Hexachlorobutadiene (C-46)	87-68-3	15	0.053	1,600	3,230	ID		<0.2	<0.2	<0.2	<0.2
alpha-Hexachlorocyclohexane	319-84-6	0.43	ID	2,000 (S)	2,000	ID		<0.050	<0.050	<0.050	<0.050
beta-Hexachlorocyclohexane	319-85-7	0.88	ID	NLV	240	ID		<0.020	<0.020	<0.020	<0.020
delta-Hexachlorocyclohexane	319-86-8	NLV	NLV	NLV	NLV	NLV		<0.010	<0.010	<0.010	<0.010
Lindane	58-89-9	0.2 (A)	0.03 (M); 0.026	ID	6,800	ID		<0.030	<0.030	<0.030	<0.030
Methoxychlor	72-43-5	40 (A)	NA	ID	45	ID		<0.50	<0.50	<0.50	<0.50

ANALYTICAL REPORT

For: AKT Peerless
22725 Orchard Lake Rd
Farmington MI 48336

Report Number: 13047
Report Date: July 20, 2023
Project Name: Galloway Creek
Project Number: 13038f-4-20
Page: 1 of 62
248-615-1333 Fax: 248-615-1334

Attn: Mr. Brian Westhoff
Ms. Rachel Stenzel

Sample Description

Eight (8) samples reported to be Soil (4) and Water (4) and identified as "Galloway Creek", Auburn Hills, MI, 7/11/23, Grab and:

1. Location D, 9:20 (Water)
2. Location D, 9:25 (Soil)
3. Location B, 9:57 (Water)
4. Location B, 10:04 (Soil)
5. Location C, 10:31 (Water)
6. Location C, 10:35 (Soil)
7. Location A, 11:10 (Water)
8. Location A, 11:15 (Soil)

Analysis Requested

Chemical Analysis per SW-846 (SW) for:

1. Volatile Organic Compounds (VOC), Methods 8260B and 5035 (Soil)
2. Semi-Volatile Organic Compounds (SVOC), Method 8270C
3. Polychlorinated Biphenyls (PCB), Method 8082A
4. Pesticides, Method 8081B
5. Herbicides, Method 8151A
6. 10 Michigan Metals
 - a) Arsenic, Method 7010
 - b) Barium, Method 7010
 - c) Cadmium, Method 7010
 - d) Chromium, Method 7010
 - e) Copper, Method 7010
 - f) Lead, Method 7010
 - g) Mercury, Method 7470A (Water) or Method 7471B (Soil)
 - h) Selenium, Method 7010
 - i) Silver, Method 7010
 - j) Zinc, Method 7010
7. Hexavalent Chromium, Methods 7196 and 3060 (Soil)

Analytical Results

Sample Description:		Location D, 9:20, 07/11/23				
Laboratory ID:	13047-1	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
<i>Volatile Organic Compounds</i>						
Acetone	Not Detected	50	µg/L	07/12/23	BD	
Benzene	Not Detected	1	µg/L	07/12/23	BD	
Bromobenzene	Not Detected	1	µg/L	07/12/23	BD	
Bromochloromethane	Not Detected	1	µg/L	07/12/23	BD	
Bromodichloromethane	Not Detected	1	µg/L	07/12/23	BD	
Bromoform	Not Detected	1	µg/L	07/12/23	BD	
Bromomethane	Not Detected	5	µg/L	07/12/23	BD	
2-Butanone (MEK)	Not Detected	25	µg/L	07/12/23	BD	
n-Butylbenzene	Not Detected	1	µg/L	07/12/23	BD	
sec-Butylbenzene	Not Detected	1	µg/L	07/12/23	BD	
tert-Butylbenzene	Not Detected	1	µg/L	07/12/23	BD	
Carbon disulfide	Not Detected	5	µg/L	07/12/23	BD	
Carbon tetrachloride	Not Detected	1	µg/L	07/12/23	BD	
Chlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
Chloroethane	Not Detected	5	µg/L	07/12/23	BD	
Chloroform	Not Detected	1	µg/L	07/12/23	BD	
Chloromethane	Not Detected	5	µg/L	07/12/23	BD	
2-Chlorotoluene	Not Detected	5	µg/L	07/12/23	BD	
4-Chlorotoluene	Not Detected	5	µg/L	07/12/23	BD	
Dibromochloromethane	Not Detected	5	µg/L	07/12/23	BD	
1,2-Dibromo-3-chloropropane	Not Detected	0.2	µg/L	07/12/23	BD	
Dibromomethane	Not Detected	5	µg/L	07/12/23	BD	
1,2-Dichlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
1,3-Dichlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
1,4-Dichlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
Dichlorodifluoromethane	Not Detected	5	µg/L	07/12/23	BD	
1,1-Dichloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,2-Dichloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,1-Dichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
cis-1,2-Dichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
trans-1,2-Dichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
1,2-Dichloropropane	Not Detected	1	µg/L	07/12/23	BD	
1,3-Dichloropropane	Not Detected	1	µg/L	07/12/23	BD	
2,2-Dichloropropane	Not Detected	1	µg/L	07/12/23	BD	
1,1-Dichloropropene	Not Detected	1	µg/L	07/12/23	BD	
1,3-Dichloropropene	Not Detected	1	µg/L	07/12/23	BD	
continued						

Sample Description:		Location D, 9:20, 07/11/23				
Laboratory ID:	13047-1	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
VOC's, Cont'd						
Ethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
Ethylene Dibromide (1,2-Dibromoethane)	Not Detected	0.2	µg/L	07/12/23	BD	
Hexachlorobutadiene	Not Detected	0.2	µg/L	07/12/23	BD	
2-Hexanone	Not Detected	50	µg/L	07/12/23	BD	
Isopropyl benzene	Not Detected	5	µg/L	07/12/23	BD	
4-Methyl-2-pentanone (MIBK)	Not Detected	50	µg/L	07/12/23	BD	
Methyl-t-butyl ether (MTBE)	Not Detected	5	µg/L	07/12/23	BD	
Methylene chloride	Not Detected	5	µg/L	07/12/23	BD	
2-Methylnaphthalene	Not Detected	5	µg/L	07/12/23	BD	
Naphthalene	Not Detected	5	µg/L	07/12/23	BD	
n-Propyl benzene	Not Detected	1	µg/L	07/12/23	BD	
Styrene	Not Detected	1	µg/L	07/12/23	BD	
1,1,1,2-Tetrachloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,1,2,2-Tetrachloroethane	Not Detected	1	µg/L	07/12/23	BD	
Tetrachloroethylene	Not Detected	1	µg/L	07/12/23	BD	
Tetrahydrofuran	Not Detected	90	µg/L	07/12/23	BD	
Toluene	Not Detected	1	µg/L	07/12/23	BD	
1,2,3-Trichlorobenzene	Not Detected	5	µg/L	07/12/23	BD	
1,2,4-Trichlorobenzene	Not Detected	5	µg/L	07/12/23	BD	
1,1,1-Trichloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,1,2-Trichloroethane	Not Detected	1	µg/L	07/12/23	BD	
Trichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
Trichlorofluoromethane	Not Detected	1	µg/L	07/12/23	BD	
1,2,3-Trichloropropane	Not Detected	1	µg/L	07/12/23	BD	
1,2,3-Trimethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
1,2,4-Trimethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
1,3,5-Trimethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
Vinyl Acetate	Not Detected	100	µg/L	07/12/23	BD	
Vinyl chloride	Not Detected	1	µg/L	07/12/23	BD	
Xylene (Total)	Not Detected	3	µg/L	07/12/23	BD	
Surrogate Standards						
1,2-Dichloroethane-d4	95.8%	-	% Recovery	07/12/23	BD	
Toluene-d8	109%	-	% Recovery	07/12/23	BD	
4-Bromofluorobenzene	103%	-	% Recovery	07/12/23	BD	
continued						

Sample Description:		Location D, 9:20, 07/11/23				
Laboratory ID:	13047-1	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Semi-Volatile Organic Cmpds			□			
Acenaphthene	Not Detected	5	µg/L	07/14/23	BD	
Acenaphthylene	Not Detected	5	µg/L	07/14/23	BD	
Aniline	Not Detected	4	µg/L	07/14/23	BD	
Anthracene	Not Detected	5	µg/L	07/14/23	BD	
Azobenzene	Not Detected	2	µg/L	07/14/23	BD	
Benzydine	Not Detected	2	µg/L	07/14/23	BD	
Benzo(a)anthracene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(b)fluoranthene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(k)fluoranthene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(g,h,i)perylene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(a)pyrene	Not Detected	1	µg/L	07/14/23	BD	
Benzyl alcohol	Not Detected	50	µg/L	07/14/23	BD	
Bis(2-chloroethyl)ether	Not Detected	1	µg/L	07/14/23	BD	
Bis(2-chloroisopropyl)ether	Not Detected	5	µg/L	07/14/23	BD	
Bis(2-chloroethoxy)methane	Not Detected	5	µg/L	07/14/23	BD	
Bis(2-ethylhexyl)phthalate	Not Detected	5	µg/L	07/14/23	BD	
4-Bromophenyl phenyl ether	Not Detected	5	µg/L	07/14/23	BD	
Butyl benzyl phthalate	Not Detected	5	µg/L	07/14/23	BD	
Carbazole	Not Detected	10	µg/L	07/14/23	BD	
4-Chloroaniline	Not Detected	10	µg/L	07/14/23	BD	
4-Chloro-3-methylphenol	Not Detected	5	µg/L	07/14/23	BD	
2-Chloronaphthalene (beta)	Not Detected	5	µg/L	07/14/23	BD	
2-Chlorophenol	Not Detected	10	µg/L	07/14/23	BD	
4-Chlorophenyl phenyl ether	Not Detected	5	µg/L	07/14/23	BD	
Chrysene	Not Detected	1	µg/L	07/14/23	BD	
Di-n-butylphthalate	Not Detected	5	µg/L	07/14/23	BD	
Di-n-octyl phthalate	Not Detected	5	µg/L	07/14/23	BD	
Dibenzo(a,h)anthracene	Not Detected	2	µg/L	07/14/23	BD	
Dibenzofuran	Not Detected	4	µg/L	07/14/23	BD	
3,3'-Dichlorobenzidine	Not Detected	2	µg/L	07/14/23	BD	
2,4-Dichlorophenol	Not Detected	10	µg/L	07/14/23	BD	
Diethylphthalate	Not Detected	5	µg/L	07/14/23	BD	
Dimethyl phthalate	Not Detected	5	µg/L	07/14/23	BD	
2,4-Dimethylphenol	Not Detected	5	µg/L	07/14/23	BD	
2,4-Dinitrophenol	Not Detected	25	µg/L	07/14/23	BD	
2,4-Dinitrotoluene	Not Detected	5	µg/L	07/14/23	BD	
2,6-Dinitrotoluene	Not Detected	5	µg/L	07/14/23	BD	
continued						

Sample Description:		Location D, 9:20, 07/11/23				
Laboratory ID:	13047-1	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
SVOC's, Cont'd			□			
Fluoranthene	Not Detected	1	µg/L	07/14/23	BD	
Fluorene	Not Detected	5	µg/L	07/14/23	BD	
Hexachlorobenzene	Not Detected	1	µg/L	07/14/23	BD	
Hexachlorocyclopentadiene	Not Detected	5	µg/L	07/14/23	BD	
Hexachloroethane	Not Detected	5	µg/L	07/14/23	BD	
Indeno(1,2,3-cd)pyrene	Not Detected	2	µg/L	07/14/23	BD	
Isophorone	Not Detected	5	µg/L	07/14/23	BD	
2-Methyl-4,6-Dinitrophenol	Not Detected	20	µg/L	07/14/23	BD	
2-Methylnaphthalene	Not Detected	5	µg/L	07/14/23	BD	
2-Methylphenol	Not Detected	10	µg/L	07/14/23	BD	
4-Methylphenol	Not Detected	10	µg/L	07/14/23	BD	
Methylphenols (total)	Not Detected	30	µg/L	07/14/23	BD	
Naphthalene	Not Detected	5	µg/L	07/14/23	BD	
2-Nitroaniline	Not Detected	25	µg/L	07/14/23	BD	
3-Nitroaniline	Not Detected	25	µg/L	07/14/23	BD	
4-Nitroaniline	Not Detected	25	µg/L	07/14/23	BD	
Nitrobenzene	Not Detected	3	µg/L	07/14/23	BD	
2-Nitrophenol	Not Detected	5	µg/L	07/14/23	BD	
4-Nitrophenol	Not Detected	25	µg/L	07/14/23	BD	
N-Nitrosodi-n-propylamine	Not Detected	5	µg/L	07/14/23	BD	
N-Nitrosodiphenylamine	Not Detected	5	µg/L	07/14/23	BD	
Pentachlorophenol	Not Detected	1	µg/L	07/14/23	BD	
Phenanthrene	Not Detected	2	µg/L	07/14/23	BD	
Phenol	Not Detected	5	µg/L	07/14/23	BD	
Pyrene	Not Detected	5	µg/L	07/14/23	BD	
Pyridine	Not Detected	20	µg/L	07/14/23	BD	
2,4,5-Trichlorophenol	Not Detected	5	µg/L	07/14/23	BD	
2,4,6-Trichlorophenol	Not Detected	4	µg/L	07/14/23	BD	
Surrogate Standards						
2-Fluorophenol	29.6%	-	% Recovery	07/14/23	BD	
Phenol-d5	27.0%	-	% Recovery	07/14/23	BD	
Nitrobenzene-d5	42.7%	-	% Recovery	07/14/23	BD	
2-Fluorobiphenyl	51.5%	-	% Recovery	07/14/23	BD	
2,4,6-Tribromophenol	48.7%	-	% Recovery	07/14/23	BD	
Terphenyl-d14	45.9%	-	% Recovery	07/14/23	BD	
continued						

Sample Description:		Location D, 9:20, 07/11/23				
Laboratory ID:	13047-1	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
PCBs						
Aroclor 1016	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1221	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1232	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1242	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1248	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1254	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1260	Not Detected	0.2	µg/L	07/13/23	DS	
Polychlorinated biphenyls (Total)	Not Detected	2	µg/L	07/13/23	DS	
Surrogate Standards						
Tetrachloro-m-xylene	59.1%	-	% Recovery	07/13/23	DS	
Decachlorobiphenyl	80.1%	-	% Recovery	07/13/23	DS	
Herbicides						
2,4-D	Not Detected	10	µg/L	07/18/23	DS	
2,4-DB	Not Detected	10	µg/L	07/18/23	DS	
2,4,5-TP (Silvex)	Not Detected	30	µg/L	07/18/23	DS	
2,4,5-T	Not Detected	10	µg/L	07/18/23	DS	
Dalapon	Not Detected	10	µg/L	07/18/23	DS	
Dicamba	Not Detected	1	µg/L	07/18/23	DS	
Dichloroprop	Not Detected	10	µg/L	07/18/23	DS	
Dinoseb	Not Detected	1	µg/L	07/18/23	DS	
MCPA	Not Detected	100	µg/L	07/18/23	DS	
MCPP	Not Detected	250	µg/L	07/18/23	DS	E, C
Surrogate Standards						
DCPAA	97.3%	-	% Recovery	07/18/23	DS	
continued						

Sample Description:		Location D, 9:20, 07/11/23					
Laboratory ID:	13047-1	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers	
Pesticides							
Aldrin	Not Detected	0.01	µg/L	07/14/23	DS	E, C	
Chlordane	Not Detected	0.05	µg/L	07/14/23	DS		
4,4'-DDD	Not Detected	0.1	µg/L	07/14/23	DS		
4,4'-DDE	Not Detected	0.1	µg/L	07/14/23	DS		
4,4'-DDT	Not Detected	0.06	µg/L	07/14/23	DS		
Dieldrin	Not Detected	0.02	µg/L	07/14/23	DS		
Endosulfan-alpha	Not Detected	0.015	µg/L	07/14/23	DS		
Endosulfan-beta	Not Detected	0.015	µg/L	07/14/23	DS		
Endosulfan (Total)	Not Detected	0.03	µg/L	07/14/23	DS		
Endosulfan sulfate	Not Detected	0.05	µg/L	07/14/23	DS		
Endrin	Not Detected	0.02	µg/L	07/14/23	DS		
Endrin aldehyde	Not Detected	0.02	µg/L	07/14/23	DS		
Heptachlor	Not Detected	0.01	µg/L	07/14/23	DS		
Heptachlor Epoxide	Not Detected	0.01	µg/L	07/14/23	DS		
alpha-Hexachlorocyclohexane	Not Detected	0.05	µg/L	07/14/23	DS		
beta-Hexachlorocyclohexane	Not Detected	0.02	µg/L	07/14/23	DS		
delta-Hexachlorocyclohexane	Not Detected	0.01	µg/L	07/14/23	DS		
Lindane	Not Detected	0.03	µg/L	07/14/23	DS		
Methoxychlor	Not Detected	0.5	µg/L	07/14/23	DS		
Toxaphene	Not Detected	1	µg/L	07/14/23	DS		
Surrogate Standards			□				
Tetrachloro-m-xylene	93.4%	-	% Recovery	07/14/23	DS		
Decachlorobiphenyl	109%	-	% Recovery	07/14/23	DS		
Metals							
Arsenic	Not Detected	5	µg/L	07/14/23	DS		
Barium	235	100	µg/L	07/14/23	DS		
Cadmium	Not Detected	1	µg/L	07/14/23	DS		
Chromium	Not Detected	5	µg/L	07/14/23	DS		
Hexavalent Chromium	Not Detected	10	µg/L	07/12/23	LB		
Copper	Not Detected	4	µg/L	07/14/23	DS		
Lead	Not Detected	3	µg/L	07/14/23	DS		
Mercury	Not Detected	0.2	µg/L	07/19/23	DS		
Selenium	Not Detected	5	µg/L	07/17/23	DS		
Silver	Not Detected	0.2	µg/L	07/14/23	DS		
Zinc	Not Detected	50	µg/L	07/14/23	DS		
continued							

Sample Description:	Location D, 9:20, 07/11/23					
Laboratory ID:	13047-1	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Analysis Information						
SVOC Extraction	Completed	-	-	07/14/23	LB	
PCB Extraction	Completed	-	-	07/13/23	LB	
Pesticide Extraction	Completed	-	-	07/13/23	LB	
Herbicide Extraction	Completed	-	-	07/17/23	LB	
Mercury Digestion	Completed	-	-	07/18/23	MR	
Metals Digestion	Completed	-	-	07/13/23	MR	

Sample Description:		Location D, 9:25, 07/11/23				
Laboratory ID:	13047-2	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
<i>Volatile Organic Compounds</i>						
Acetone	Not Detected	1,000	µg/Kg, dry wt.	07/12/23	BD	E, C
Benzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Bromobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromochloromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromodichloromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromoform	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromomethane	Not Detected	200	µg/Kg, dry wt.	07/12/23	BD	
2-Butanone (MEK)	Not Detected	750	µg/Kg, dry wt.	07/12/23	BD	
n-Butylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
sec-Butylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
tert-Butylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Carbon disulfide	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Carbon tetrachloride	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Chlorobenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Chloroethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Chloroform	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Chloromethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
2-Chlorotoluene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
4-Chlorotoluene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Dibromochloromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dibromo-3-chloropropane	Not Detected	10	µg/Kg, dry wt.	07/12/23	BD	
Dibromomethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dichlorobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,3-Dichlorobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,4-Dichlorobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Dichlorodifluoromethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,1-Dichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1-Dichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
cis-1,2-Dichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
trans-1,2-Dichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dichloropropane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,3-Dichloropropane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
2,2-Dichloropropane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1-Dichloropropene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,3-Dichloropropene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
continued						

Sample Description:		Location D, 9:25, 07/11/23				
Laboratory ID:	13047-2	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
VOC's, Cont'd						
Ethylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Ethylene Dibromide (1,2-Dibromoethane)	Not Detected	20	µg/Kg, dry wt.	07/12/23	BD	
Hexachlorobutadiene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
2-Hexanone	Not Detected	2,500	µg/Kg, dry wt.	07/12/23	BD	
Isopropyl benzene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
4-Methyl-2-pentanone (MIBK)	Not Detected	2,500	µg/Kg, dry wt.	07/12/23	BD	
Methyl-t-butyl ether (MTBE)	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Methylene chloride	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
2-Methylnaphthalene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Naphthalene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
n-Propylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Styrene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1,1,2-Tetrachloroethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,1,2,2-Tetrachloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Tetrachloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Tetrahydrofuran	Not Detected	1,000	µg/Kg, dry wt.	07/12/23	BD	
Toluene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,3-Trichlorobenzene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,2,4-Trichlorobenzene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,1,1-Trichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1,2-Trichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Trichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Trichlorofluoromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,3-Trichloropropane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,3-Trimethylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,4-Trimethylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,3,5-Trimethylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Vinyl Acetate	Not Detected	5,000	µg/Kg, dry wt.	07/12/23	BD	
Vinyl Chloride	Not Detected	40	µg/Kg, dry wt.	07/12/23	BD	
Xylene (Total)	Not Detected	150	µg/Kg, dry wt.	07/12/23	BD	
Surrogate Standards						
1,2-Dichloroethane-d4	101%	-	% Recovery	07/12/23	BD	
Toluene-d8	110%	-	% Recovery	07/12/23	BD	
4-Bromofluorobenzene	104%	-	% Recovery	07/12/23	BD	
continued						

Sample Description:		Location D, 9:25, 07/11/23				
Laboratory ID:	13047-2	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
<i>Semi-Volatile Organic Cmpds</i>						
Acenaphthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Acenaphthylene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Aniline	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Anthracene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Azobenzene	Not Detected	200	µg/Kg, dry wt.	07/14/23	BD	
Benzydine	Not Detected	1,000	µg/Kg, dry wt.	07/14/23	BD	
Benzo(a)anthracene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(b)fluoranthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(k)fluoranthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(g,h,i)perylene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(a)pyrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzyl alcohol	Not Detected	3,300	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-chloroethyl)ether	Not Detected	100	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-chloroisopropyl)ether	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-chloroethoxy)methane	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-ethylhexyl)phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Bromophenyl phenyl ether	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Butyl benzyl phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Carbazole	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Chloroaniline	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Chloro-3-methylphenol	Not Detected	280	µg/Kg, dry wt.	07/14/23	BD	
2-Chloronaphthalene (beta)	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Chlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Chlorophenyl phenyl ether	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Chrysene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Di-n-butylphthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Di-n-octyl phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Dibenzo(a,h)anthracene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Dibenzofuran	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
3,3'-Dichlorobenzidine	Not Detected	2,000	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dichlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Diethylphthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Dimethyl phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dimethylphenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dinitrophenol	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dinitrotoluene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,6-Dinitrotoluene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
continued						

Sample Description:		Location D, 9:25, 07/11/23				
Laboratory ID:	13047-2	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
SVOC's, Cont'd						
Fluoranthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Fluorene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Hexachlorobenzene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Hexachlorocyclopentadiene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Hexachloroethane	Not Detected	300	µg/Kg, dry wt.	07/14/23	BD	
Indeno(1,2,3-cd)pyrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Isophorone	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Methyl-4,6-Dinitrophenol	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
2-Methylnaphthalene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Methylphenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Methylphenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Methylphenols (total)	Not Detected	1,000	µg/Kg, dry wt.	07/14/23	BD	
Naphthalene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Nitroaniline	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
3-Nitroaniline	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
4-Nitroaniline	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
Nitrobenzene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Nitrophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Nitrophenol	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
N-Nitrosodi-n-propylamine	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
N-Nitrosodiphenylamine	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Pentachlorophenol	Not Detected	20	µg/Kg, dry wt.	07/14/23	BD	
Phenanthrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Phenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Pyrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Pyridine	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4,5-Trichlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4,6-Trichlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Surrogate Standards						
2-Fluorophenol	38.8%	-	% Recovery	07/14/23	BD	
Phenol-d5	39.9%	-	% Recovery	07/14/23	BD	
Nitrobenzene-d5	44.4%	-	% Recovery	07/14/23	BD	
2-Fluorobiphenyl	45.3%	-	% Recovery	07/14/23	BD	
2,4,6-Tribromophenol	45.7%	-	% Recovery	07/14/23	BD	
Terphenyl-d14	55.8%	-	% Recovery	07/14/23	BD	
continued						

Sample Description:		Location D, 9:25, 07/11/23				
Laboratory ID:	13047-2	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
PCBs						
Aroclor 1016	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1221	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1232	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1242	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1248	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1254	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1260	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Polychlorinated biphenyls (Total)	Not Detected	700	µg/Kg, dry wt.	07/13/23	DS	
Surrogate Standards						
Tetrachloro-m-xylene	64.2%	-	% Recovery	07/13/23	DS	
Decachlorobiphenyl	68.9%	-	% Recovery	07/13/23	DS	
Herbicides						
2,4-D	Not Detected	200	µg/Kg, dry wt.	07/18/23	DS	
2,4-DB	Not Detected	200	µg/Kg, dry wt.	07/18/23	DS	
2,4,5-TP (Silvex)	Not Detected	300	µg/Kg, dry wt.	07/18/23	DS	
2,4,5-T	Not Detected	500	µg/Kg, dry wt.	07/18/23	DS	
Dalapon	Not Detected	500	µg/Kg, dry wt.	07/18/23	DS	
Dicamba	Not Detected	50	µg/Kg, dry wt.	07/18/23	DS	
Dichloroprop	Not Detected	50	µg/Kg, dry wt.	07/18/23	DS	
Dinoseb	Not Detected	200	µg/Kg, dry wt.	07/18/23	DS	
MCPA	Not Detected	5,000	µg/Kg, dry wt.	07/18/23	DS	
MCPP	Not Detected	5,000	µg/Kg, dry wt.	07/18/23	DS	
Surrogate Standards						
DCPAA	89.4%	-	% Recovery	07/18/23	DS	
continued						

Sample Description:		Location D, 9:25, 07/11/23				
Laboratory ID:	13047-2	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Pesticides						
Aldrin	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Chlordane	Not Detected	30	µg/Kg, dry wt.	07/14/23	DS	
4,4'-DDD	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
4,4'-DDE	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
4,4'-DDT	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Dieldrin	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan-alpha	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan-beta	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan (Total)	Not Detected	40	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan sulfate	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endrin	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endrin aldehyde	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Heptachlor	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Heptachlor Epoxide	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
alpha-Hexachlorocyclohexane	Not Detected	10	µg/Kg, dry wt.	07/14/23	DS	
beta-Hexachlorocyclohexane	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
delta-Hexachlorocyclohexane	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Lindane	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Methoxychlor	Not Detected	50	µg/Kg, dry wt.	07/14/23	DS	
Toxaphene	Not Detected	170	µg/Kg, dry wt.	07/14/23	DS	
Surrogate Standards						
Tetrachloro-m-xylene	99.9%	-	% Recovery	07/14/23	DS	
Decachlorobiphenyl	88.6%	-	% Recovery	07/14/23	DS	
Metals						
Arsenic	1,410	100	µg/Kg, dry wt.	07/14/23	DS	
Barium	45,900	1,000	µg/Kg, dry wt.	07/14/23	DS	
Cadmium	Not Detected	200	µg/Kg, dry wt.	07/14/23	DS	
Chromium	Not Detected	2,000	µg/Kg, dry wt.	07/14/23	DS	
Hexavalent Chromium	Not Detected	2,000	µg/Kg, dry wt.	07/12/23	LB	
Copper	3,240	1,000	µg/Kg, dry wt.	07/14/23	DS	
Lead	1,880	1,000	µg/Kg, dry wt.	07/14/23	DS	
Mercury	Not Detected	50	µg/Kg, dry wt.	07/19/23	DS	
Selenium	Not Detected	200	µg/Kg, dry wt.	07/17/23	DS	
Silver	Not Detected	100	µg/Kg, dry wt.	07/14/23	DS	
Zinc	9,400	1,000	µg/Kg, dry wt.	07/14/23	DS	
continued						

Sample Description:	Location D, 9:25, 07/11/23					
Laboratory ID:	13047-2	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Analysis Information						
Dry Weight Solids	83.6%	-	% by weight	07/11/23	LB	
SVOC Extraction	Completed	-	-	07/14/23	LB	
PCB Extraction	Completed	-	-	07/13/23	LB	
Pesticide Extraction	Completed	-	-	07/13/23	LB	
Herbicide Extraction	Completed	-	-	07/18/23	LB	
Mercury Digestion	Completed	-	-	07/18/23	MR	
Metals Digestion	Completed	-	-	07/13/23	MR	

Sample Description:		Location B, 9:57, 07/11/23				
Laboratory ID:	13047-3	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
<i>Volatile Organic Compounds</i>						
Acetone	Not Detected	50	µg/L	07/12/23	BD	
Benzene	Not Detected	1	µg/L	07/12/23	BD	
Bromobenzene	Not Detected	1	µg/L	07/12/23	BD	
Bromochloromethane	Not Detected	1	µg/L	07/12/23	BD	
Bromodichloromethane	Not Detected	1	µg/L	07/12/23	BD	
Bromoform	Not Detected	1	µg/L	07/12/23	BD	
Bromomethane	Not Detected	5	µg/L	07/12/23	BD	
2-Butanone (MEK)	Not Detected	25	µg/L	07/12/23	BD	
n-Butylbenzene	Not Detected	1	µg/L	07/12/23	BD	
sec-Butylbenzene	Not Detected	1	µg/L	07/12/23	BD	
tert-Butylbenzene	Not Detected	1	µg/L	07/12/23	BD	
Carbon disulfide	Not Detected	5	µg/L	07/12/23	BD	
Carbon tetrachloride	Not Detected	1	µg/L	07/12/23	BD	
Chlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
Chloroethane	Not Detected	5	µg/L	07/12/23	BD	
Chloroform	Not Detected	1	µg/L	07/12/23	BD	
Chloromethane	Not Detected	5	µg/L	07/12/23	BD	
2-Chlorotoluene	Not Detected	5	µg/L	07/12/23	BD	
4-Chlorotoluene	Not Detected	5	µg/L	07/12/23	BD	
Dibromochloromethane	Not Detected	5	µg/L	07/12/23	BD	
1,2-Dibromo-3-chloropropane	Not Detected	0.2	µg/L	07/12/23	BD	
Dibromomethane	Not Detected	5	µg/L	07/12/23	BD	
1,2-Dichlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
1,3-Dichlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
1,4-Dichlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
Dichlorodifluoromethane	Not Detected	5	µg/L	07/12/23	BD	
1,1-Dichloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,2-Dichloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,1-Dichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
cis-1,2-Dichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
trans-1,2-Dichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
1,2-Dichloropropane	Not Detected	1	µg/L	07/12/23	BD	
1,3-Dichloropropane	Not Detected	1	µg/L	07/12/23	BD	
2,2-Dichloropropane	Not Detected	1	µg/L	07/12/23	BD	
1,1-Dichloropropene	Not Detected	1	µg/L	07/12/23	BD	
1,3-Dichloropropene	Not Detected	1	µg/L	07/12/23	BD	
continued						

Sample Description:		Location B, 9:57, 07/11/23				
Laboratory ID:	13047-3	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
VOC's, Cont'd						
Ethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
Ethylene Dibromide (1,2-Dibromoethane)	Not Detected	0.2	µg/L	07/12/23	BD	
Hexachlorobutadiene	Not Detected	0.2	µg/L	07/12/23	BD	
2-Hexanone	Not Detected	50	µg/L	07/12/23	BD	
Isopropyl benzene	Not Detected	5	µg/L	07/12/23	BD	
4-Methyl-2-pentanone (MIBK)	Not Detected	50	µg/L	07/12/23	BD	
Methyl-t-butyl ether (MTBE)	Not Detected	5	µg/L	07/12/23	BD	
Methylene chloride	Not Detected	5	µg/L	07/12/23	BD	
2-Methylnaphthalene	Not Detected	5	µg/L	07/12/23	BD	
Naphthalene	Not Detected	5	µg/L	07/12/23	BD	
n-Propyl benzene	Not Detected	1	µg/L	07/12/23	BD	
Styrene	Not Detected	1	µg/L	07/12/23	BD	
1,1,1,2-Tetrachloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,1,2,2-Tetrachloroethane	Not Detected	1	µg/L	07/12/23	BD	
Tetrachloroethylene	Not Detected	1	µg/L	07/12/23	BD	
Tetrahydrofuran	Not Detected	90	µg/L	07/12/23	BD	
Toluene	Not Detected	1	µg/L	07/12/23	BD	
1,2,3-Trichlorobenzene	Not Detected	5	µg/L	07/12/23	BD	
1,2,4-Trichlorobenzene	Not Detected	5	µg/L	07/12/23	BD	
1,1,1-Trichloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,1,2-Trichloroethane	Not Detected	1	µg/L	07/12/23	BD	
Trichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
Trichlorofluoromethane	Not Detected	1	µg/L	07/12/23	BD	
1,2,3-Trichloropropane	Not Detected	1	µg/L	07/12/23	BD	
1,2,3-Trimethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
1,2,4-Trimethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
1,3,5-Trimethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
Vinyl Acetate	Not Detected	100	µg/L	07/12/23	BD	
Vinyl chloride	Not Detected	1	µg/L	07/12/23	BD	
Xylene (Total)	Not Detected	3	µg/L	07/12/23	BD	
Surrogate Standards						
1,2-Dichloroethane-d4	95.8%	-	% Recovery	07/12/23	BD	
Toluene-d8	108%	-	% Recovery	07/12/23	BD	
4-Bromofluorobenzene	102%	-	% Recovery	07/12/23	BD	
continued						

Sample Description:		Location B, 9:57, 07/11/23				
Laboratory ID:	13047-3	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Semi-Volatile Organic Cmpds			□			
Acenaphthene	Not Detected	5	µg/L	07/14/23	BD	
Acenaphthylene	Not Detected	5	µg/L	07/14/23	BD	
Aniline	Not Detected	4	µg/L	07/14/23	BD	
Anthracene	Not Detected	5	µg/L	07/14/23	BD	
Azobenzene	Not Detected	2	µg/L	07/14/23	BD	
Benzidine	Not Detected	2	µg/L	07/14/23	BD	
Benzo(a)anthracene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(b)fluoranthene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(k)fluoranthene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(g,h,i)perylene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(a)pyrene	Not Detected	1	µg/L	07/14/23	BD	
Benzyl alcohol	Not Detected	50	µg/L	07/14/23	BD	
Bis(2-chloroethyl)ether	Not Detected	1	µg/L	07/14/23	BD	
Bis(2-chloroisopropyl)ether	Not Detected	5	µg/L	07/14/23	BD	
Bis(2-chloroethoxy)methane	Not Detected	5	µg/L	07/14/23	BD	
Bis(2-ethylhexyl)phthalate	Not Detected	5	µg/L	07/14/23	BD	
4-Bromophenyl phenyl ether	Not Detected	5	µg/L	07/14/23	BD	
Butyl benzyl phthalate	Not Detected	5	µg/L	07/14/23	BD	
Carbazole	Not Detected	10	µg/L	07/14/23	BD	
4-Chloroaniline	Not Detected	10	µg/L	07/14/23	BD	
4-Chloro-3-methylphenol	Not Detected	5	µg/L	07/14/23	BD	
2-Chloronaphthalene (beta)	Not Detected	5	µg/L	07/14/23	BD	
2-Chlorophenol	Not Detected	10	µg/L	07/14/23	BD	
4-Chlorophenyl phenyl ether	Not Detected	5	µg/L	07/14/23	BD	
Chrysene	Not Detected	1	µg/L	07/14/23	BD	
Di-n-butylphthalate	Not Detected	5	µg/L	07/14/23	BD	
Di-n-octyl phthalate	Not Detected	5	µg/L	07/14/23	BD	
Dibenzo(a,h)anthracene	Not Detected	2	µg/L	07/14/23	BD	
Dibenzofuran	Not Detected	4	µg/L	07/14/23	BD	
3,3'-Dichlorobenzidine	Not Detected	2	µg/L	07/14/23	BD	
2,4-Dichlorophenol	Not Detected	10	µg/L	07/14/23	BD	
Diethylphthalate	Not Detected	5	µg/L	07/14/23	BD	
Dimethyl phthalate	Not Detected	5	µg/L	07/14/23	BD	
2,4-Dimethylphenol	Not Detected	5	µg/L	07/14/23	BD	
2,4-Dinitrophenol	Not Detected	25	µg/L	07/14/23	BD	
2,4-Dinitrotoluene	Not Detected	5	µg/L	07/14/23	BD	
2,6-Dinitrotoluene	Not Detected	5	µg/L	07/14/23	BD	
continued						

Sample Description:		Location B, 9:57, 07/11/23				
Laboratory ID:	13047-3	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
SVOC's, Cont'd			□			
Fluoranthene	Not Detected	1	µg/L	07/14/23	BD	
Fluorene	Not Detected	5	µg/L	07/14/23	BD	
Hexachlorobenzene	Not Detected	1	µg/L	07/14/23	BD	
Hexachlorocyclopentadiene	Not Detected	5	µg/L	07/14/23	BD	
Hexachloroethane	Not Detected	5	µg/L	07/14/23	BD	
Indeno(1,2,3-cd)pyrene	Not Detected	2	µg/L	07/14/23	BD	
Isophorone	Not Detected	5	µg/L	07/14/23	BD	
2-Methyl-4,6-Dinitrophenol	Not Detected	20	µg/L	07/14/23	BD	
2-Methylnaphthalene	Not Detected	5	µg/L	07/14/23	BD	
2-Methylphenol	Not Detected	10	µg/L	07/14/23	BD	
4-Methylphenol	Not Detected	10	µg/L	07/14/23	BD	
Methylphenols (total)	Not Detected	30	µg/L	07/14/23	BD	
Naphthalene	Not Detected	5	µg/L	07/14/23	BD	
2-Nitroaniline	Not Detected	25	µg/L	07/14/23	BD	
3-Nitroaniline	Not Detected	25	µg/L	07/14/23	BD	
4-Nitroaniline	Not Detected	25	µg/L	07/14/23	BD	
Nitrobenzene	Not Detected	3	µg/L	07/14/23	BD	
2-Nitrophenol	Not Detected	5	µg/L	07/14/23	BD	
4-Nitrophenol	Not Detected	25	µg/L	07/14/23	BD	
N-Nitrosodi-n-propylamine	Not Detected	5	µg/L	07/14/23	BD	
N-Nitrosodiphenylamine	Not Detected	5	µg/L	07/14/23	BD	
Pentachlorophenol	Not Detected	1	µg/L	07/14/23	BD	
Phenanthrene	Not Detected	2	µg/L	07/14/23	BD	
Phenol	Not Detected	5	µg/L	07/14/23	BD	
Pyrene	Not Detected	5	µg/L	07/14/23	BD	
Pyridine	Not Detected	20	µg/L	07/14/23	BD	
2,4,5-Trichlorophenol	Not Detected	5	µg/L	07/14/23	BD	
2,4,6-Trichlorophenol	Not Detected	4	µg/L	07/14/23	BD	
Surrogate Standards						
2-Fluorophenol	27.1%	-	% Recovery	07/14/23	BD	
Phenol-d5	23.3%	-	% Recovery	07/14/23	BD	
Nitrobenzene-d5	49.6%	-	% Recovery	07/14/23	BD	
2-Fluorobiphenyl	58.4%	-	% Recovery	07/14/23	BD	
2,4,6-Tribromophenol	47.1%	-	% Recovery	07/14/23	BD	
Terphenyl-d14	49.2%	-	% Recovery	07/14/23	BD	
continued						

Sample Description:		Location B, 9:57, 07/11/23				
Laboratory ID:	13047-3	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
PCBs						
Aroclor 1016	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1221	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1232	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1242	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1248	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1254	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1260	Not Detected	0.2	µg/L	07/13/23	DS	
Polychlorinated biphenyls (Total)	Not Detected	2	µg/L	07/13/23	DS	
Surrogate Standards						
Tetrachloro-m-xylene	57.9%	-	% Recovery	07/13/23	DS	
Decachlorobiphenyl	79.3%	-	% Recovery	07/13/23	DS	
Herbicides						
2,4-D	Not Detected	10	µg/L	07/18/23	DS	
2,4-DB	Not Detected	10	µg/L	07/18/23	DS	
2,4,5-TP (Silvex)	Not Detected	30	µg/L	07/18/23	DS	
2,4,5-T	Not Detected	10	µg/L	07/18/23	DS	
Dalapon	Not Detected	10	µg/L	07/18/23	DS	
Dicamba	Not Detected	1	µg/L	07/18/23	DS	
Dichloroprop	Not Detected	10	µg/L	07/18/23	DS	
Dinoseb	Not Detected	1	µg/L	07/18/23	DS	
MCPA	Not Detected	100	µg/L	07/18/23	DS	
MCPP	Not Detected	250	µg/L	07/18/23	DS	E, C
Surrogate Standards						
DCPAA	98.7%	-	% Recovery	07/18/23	DS	
continued						

Sample Description:		Location B, 9:57, 07/11/23					
Laboratory ID:	13047-3	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers	
Pesticides							
Aldrin	Not Detected	0.01	µg/L	07/14/23	DS	E, C	
Chlordane	Not Detected	0.05	µg/L	07/14/23	DS		
4,4'-DDD	Not Detected	0.1	µg/L	07/14/23	DS		
4,4'-DDE	Not Detected	0.1	µg/L	07/14/23	DS		
4,4'-DDT	Not Detected	0.06	µg/L	07/14/23	DS		
Dieldrin	Not Detected	0.02	µg/L	07/14/23	DS		
Endosulfan-alpha	Not Detected	0.015	µg/L	07/14/23	DS		
Endosulfan-beta	Not Detected	0.015	µg/L	07/14/23	DS		
Endosulfan (Total)	Not Detected	0.03	µg/L	07/14/23	DS		
Endosulfan sulfate	Not Detected	0.05	µg/L	07/14/23	DS		
Endrin	Not Detected	0.02	µg/L	07/14/23	DS		
Endrin aldehyde	Not Detected	0.02	µg/L	07/14/23	DS		
Heptachlor	Not Detected	0.01	µg/L	07/14/23	DS		
Heptachlor Epoxide	Not Detected	0.01	µg/L	07/14/23	DS		
alpha-Hexachlorocyclohexane	Not Detected	0.05	µg/L	07/14/23	DS		
beta-Hexachlorocyclohexane	Not Detected	0.02	µg/L	07/14/23	DS		
delta-Hexachlorocyclohexane	Not Detected	0.01	µg/L	07/14/23	DS		
Lindane	Not Detected	0.03	µg/L	07/14/23	DS		
Methoxychlor	Not Detected	0.5	µg/L	07/14/23	DS		
Toxaphene	Not Detected	1	µg/L	07/14/23	DS		
Surrogate Standards			□				
Tetrachloro-m-xylene	91.5%	-	% Recovery	07/14/23	DS		
Decachlorobiphenyl	109%	-	% Recovery	07/14/23	DS		
Metals							
Arsenic	Not Detected	5	µg/L	07/14/23	DS		
Barium	201	100	µg/L	07/14/23	DS		
Cadmium	Not Detected	1	µg/L	07/14/23	DS		
Chromium	Not Detected	5	µg/L	07/14/23	DS		
Hexavalent Chromium	Not Detected	10	µg/L	07/12/23	LB		
Copper	Not Detected	4	µg/L	07/14/23	DS		
Lead	Not Detected	3	µg/L	07/14/23	DS		
Mercury	Not Detected	0.2	µg/L	07/19/23	DS		
Selenium	Not Detected	5	µg/L	07/17/23	DS		
Silver	Not Detected	0.2	µg/L	07/14/23	DS		
Zinc	Not Detected	50	µg/L	07/14/23	DS		
continued							

Sample Description:	Location B, 9:57, 07/11/23					
Laboratory ID:	13047-3	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Analysis Information						
SVOC Extraction	Completed	-	-	07/14/23	LB	
PCB Extraction	Completed	-	-	07/13/23	LB	
Pesticide Extraction	Completed	-	-	07/13/23	LB	
Herbicide Extraction	Completed	-	-	07/17/23	LB	
Mercury Digestion	Completed	-	-	07/18/23	MR	
Metals Digestion	Completed	-	-	07/13/23	MR	

Sample Description:		Location B, 10:04, 07/11/23				
Laboratory ID:	13047-4	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
<i>Volatile Organic Compounds</i>						
Acetone	Not Detected	1,000	µg/Kg, dry wt.	07/12/23	BD	E, C
Benzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Bromobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromochloromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromodichloromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromoform	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromomethane	Not Detected	200	µg/Kg, dry wt.	07/12/23	BD	
2-Butanone (MEK)	Not Detected	750	µg/Kg, dry wt.	07/12/23	BD	
n-Butylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
sec-Butylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
tert-Butylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Carbon disulfide	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Carbon tetrachloride	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Chlorobenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Chloroethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Chloroform	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Chloromethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
2-Chlorotoluene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
4-Chlorotoluene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Dibromochloromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dibromo-3-chloropropane	Not Detected	10	µg/Kg, dry wt.	07/12/23	BD	
Dibromomethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dichlorobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,3-Dichlorobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,4-Dichlorobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Dichlorodifluoromethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,1-Dichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1-Dichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
cis-1,2-Dichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
trans-1,2-Dichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dichloropropane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,3-Dichloropropane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
2,2-Dichloropropane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1-Dichloropropene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,3-Dichloropropene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
continued						

Sample Description:		Location B, 10:04, 07/11/23				
Laboratory ID:	13047-4	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
VOC's, Cont'd						
Ethylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Ethylene Dibromide (1,2-Dibromoethane)	Not Detected	20	µg/Kg, dry wt.	07/12/23	BD	
Hexachlorobutadiene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
2-Hexanone	Not Detected	2,500	µg/Kg, dry wt.	07/12/23	BD	
Isopropyl benzene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
4-Methyl-2-pentanone (MIBK)	Not Detected	2,500	µg/Kg, dry wt.	07/12/23	BD	
Methyl-t-butyl ether (MTBE)	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Methylene chloride	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
2-Methylnaphthalene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Naphthalene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
n-Propylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Styrene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1,1,2-Tetrachloroethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,1,2,2-Tetrachloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Tetrachloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Tetrahydrofuran	Not Detected	1,000	µg/Kg, dry wt.	07/12/23	BD	
Toluene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,3-Trichlorobenzene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,2,4-Trichlorobenzene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,1,1-Trichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1,2-Trichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Trichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Trichlorofluoromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,3-Trichloropropane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,3-Trimethylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,4-Trimethylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,3,5-Trimethylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Vinyl Acetate	Not Detected	5,000	µg/Kg, dry wt.	07/12/23	BD	
Vinyl Chloride	Not Detected	40	µg/Kg, dry wt.	07/12/23	BD	
Xylene (Total)	Not Detected	150	µg/Kg, dry wt.	07/12/23	BD	
Surrogate Standards						
1,2-Dichloroethane-d4	102%	-	% Recovery	07/12/23	BD	
Toluene-d8	109%	-	% Recovery	07/12/23	BD	
4-Bromofluorobenzene	102%	-	% Recovery	07/12/23	BD	
continued						

Sample Description:		Location B, 10:04, 07/11/23				
Laboratory ID:	13047-4	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
<i>Semi-Volatile Organic Cmpds</i>						
Acenaphthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Acenaphthylene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Aniline	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Anthracene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Azobenzene	Not Detected	200	µg/Kg, dry wt.	07/14/23	BD	
Benzydine	Not Detected	1,000	µg/Kg, dry wt.	07/14/23	BD	
Benzo(a)anthracene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(b)fluoranthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(k)fluoranthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(g,h,i)perylene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(a)pyrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzyl alcohol	Not Detected	3,300	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-chloroethyl)ether	Not Detected	100	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-chloroisopropyl)ether	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-chloroethoxy)methane	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-ethylhexyl)phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Bromophenyl phenyl ether	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Butyl benzyl phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Carbazole	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Chloroaniline	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Chloro-3-methylphenol	Not Detected	280	µg/Kg, dry wt.	07/14/23	BD	
2-Chloronaphthalene (beta)	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Chlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Chlorophenyl phenyl ether	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Chrysene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Di-n-butylphthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Di-n-octyl phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Dibenzo(a,h)anthracene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Dibenzofuran	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
3,3'-Dichlorobenzidine	Not Detected	2,000	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dichlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Diethylphthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Dimethyl phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dimethylphenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dinitrophenol	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dinitrotoluene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,6-Dinitrotoluene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
continued						

Sample Description:		Location B, 10:04, 07/11/23				
Laboratory ID:	13047-4	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
SVOC's, Cont'd						
Fluoranthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Fluorene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Hexachlorobenzene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Hexachlorocyclopentadiene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Hexachloroethane	Not Detected	300	µg/Kg, dry wt.	07/14/23	BD	
Indeno(1,2,3-cd)pyrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Isophorone	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Methyl-4,6-Dinitrophenol	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
2-Methylnaphthalene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Methylphenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Methylphenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Methylphenols (total)	Not Detected	1,000	µg/Kg, dry wt.	07/14/23	BD	
Naphthalene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Nitroaniline	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
3-Nitroaniline	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
4-Nitroaniline	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
Nitrobenzene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Nitrophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Nitrophenol	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
N-Nitrosodi-n-propylamine	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
N-Nitrosodiphenylamine	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Pentachlorophenol	Not Detected	20	µg/Kg, dry wt.	07/14/23	BD	
Phenanthrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Phenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Pyrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Pyridine	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4,5-Trichlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4,6-Trichlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Surrogate Standards						
2-Fluorophenol	39.1%	-	% Recovery	07/14/23	BD	
Phenol-d5	40.6%	-	% Recovery	07/14/23	BD	
Nitrobenzene-d5	45.1%	-	% Recovery	07/14/23	BD	
2-Fluorobiphenyl	45.0%	-	% Recovery	07/14/23	BD	
2,4,6-Tribromophenol	44.8%	-	% Recovery	07/14/23	BD	
Terphenyl-d14	53.4%	-	% Recovery	07/14/23	BD	
continued						

Sample Description:		Location B, 10:04, 07/11/23				
Laboratory ID:	13047-4	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
PCBs						
Aroclor 1016	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1221	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1232	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1242	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1248	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1254	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1260	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Polychlorinated biphenyls (Total)	Not Detected	700	µg/Kg, dry wt.	07/13/23	DS	
Surrogate Standards						
Tetrachloro-m-xylene	70.6%	-	% Recovery	07/13/23	DS	
Decachlorobiphenyl	79.4%	-	% Recovery	07/13/23	DS	
Herbicides						
2,4-D	Not Detected	200	µg/Kg, dry wt.	07/18/23	DS	
2,4-DB	Not Detected	200	µg/Kg, dry wt.	07/18/23	DS	
2,4,5-TP (Silvex)	Not Detected	300	µg/Kg, dry wt.	07/18/23	DS	
2,4,5-T	Not Detected	500	µg/Kg, dry wt.	07/18/23	DS	
Dalapon	Not Detected	500	µg/Kg, dry wt.	07/18/23	DS	
Dicamba	Not Detected	50	µg/Kg, dry wt.	07/18/23	DS	
Dichloroprop	Not Detected	50	µg/Kg, dry wt.	07/18/23	DS	
Dinoseb	Not Detected	200	µg/Kg, dry wt.	07/18/23	DS	
MCPA	Not Detected	5,000	µg/Kg, dry wt.	07/18/23	DS	
MCPP	Not Detected	5,000	µg/Kg, dry wt.	07/18/23	DS	
Surrogate Standards						
DCPAA	88.5%	-	% Recovery	07/18/23	DS	
continued						

Sample Description:		Location B, 10:04, 07/11/23				
Laboratory ID:	13047-4	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Pesticides						
Aldrin	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Chlordane	Not Detected	30	µg/Kg, dry wt.	07/14/23	DS	
4,4'-DDD	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
4,4'-DDE	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
4,4'-DDT	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Dieldrin	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan-alpha	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan-beta	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan (Total)	Not Detected	40	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan sulfate	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endrin	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endrin aldehyde	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Heptachlor	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Heptachlor Epoxide	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
alpha-Hexachlorocyclohexane	Not Detected	10	µg/Kg, dry wt.	07/14/23	DS	
beta-Hexachlorocyclohexane	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
delta-Hexachlorocyclohexane	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Lindane	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Methoxychlor	Not Detected	50	µg/Kg, dry wt.	07/14/23	DS	
Toxaphene	Not Detected	170	µg/Kg, dry wt.	07/14/23	DS	
Surrogate Standards						
Tetrachloro-m-xylene	121%	-	% Recovery	07/14/23	DS	
Decachlorobiphenyl	107%	-	% Recovery	07/14/23	DS	
Metals						
Arsenic	2,130	100	µg/Kg, dry wt.	07/14/23	DS	
Barium	90,800	1,000	µg/Kg, dry wt.	07/14/23	DS	
Cadmium	Not Detected	200	µg/Kg, dry wt.	07/14/23	DS	
Chromium	3,510	2,000	µg/Kg, dry wt.	07/14/23	DS	
Hexavalent Chromium	Not Detected	2,000	µg/Kg, dry wt.	07/12/23	LB	
Copper	4,680	1,000	µg/Kg, dry wt.	07/14/23	DS	
Lead	5,060	1,000	µg/Kg, dry wt.	07/14/23	DS	
Mercury	Not Detected	50	µg/Kg, dry wt.	07/19/23	DS	
Selenium	Not Detected	200	µg/Kg, dry wt.	07/17/23	DS	
Silver	Not Detected	100	µg/Kg, dry wt.	07/14/23	DS	
Zinc	9,800	1,000	µg/Kg, dry wt.	07/14/23	DS	
continued						

Sample Description:	Location B, 10:04, 07/11/23					
Laboratory ID:	13047-4	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Analysis Information						
Dry Weight Solids	74.3%	-	% by weight	07/11/23	LB	
SVOC Extraction	Completed	-	-	07/14/23	LB	
PCB Extraction	Completed	-	-	07/13/23	LB	
Pesticide Extraction	Completed	-	-	07/13/23	LB	
Herbicide Extraction	Completed	-	-	07/18/23	LB	
Mercury Digestion	Completed	-	-	07/18/23	MR	
Metals Digestion	Completed	-	-	07/13/23	MR	

Sample Description:		Location C, 10:31, 07/11/23				
Laboratory ID:	13047-5	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
<i>Volatile Organic Compounds</i>						
Acetone	Not Detected	50	µg/L	07/12/23	BD	
Benzene	Not Detected	1	µg/L	07/12/23	BD	
Bromobenzene	Not Detected	1	µg/L	07/12/23	BD	
Bromochloromethane	Not Detected	1	µg/L	07/12/23	BD	
Bromodichloromethane	Not Detected	1	µg/L	07/12/23	BD	
Bromoform	Not Detected	1	µg/L	07/12/23	BD	
Bromomethane	Not Detected	5	µg/L	07/12/23	BD	
2-Butanone (MEK)	Not Detected	25	µg/L	07/12/23	BD	
n-Butylbenzene	Not Detected	1	µg/L	07/12/23	BD	
sec-Butylbenzene	Not Detected	1	µg/L	07/12/23	BD	
tert-Butylbenzene	Not Detected	1	µg/L	07/12/23	BD	
Carbon disulfide	Not Detected	5	µg/L	07/12/23	BD	
Carbon tetrachloride	Not Detected	1	µg/L	07/12/23	BD	
Chlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
Chloroethane	Not Detected	5	µg/L	07/12/23	BD	
Chloroform	Not Detected	1	µg/L	07/12/23	BD	
Chloromethane	Not Detected	5	µg/L	07/12/23	BD	
2-Chlorotoluene	Not Detected	5	µg/L	07/12/23	BD	
4-Chlorotoluene	Not Detected	5	µg/L	07/12/23	BD	
Dibromochloromethane	Not Detected	5	µg/L	07/12/23	BD	
1,2-Dibromo-3-chloropropane	Not Detected	0.2	µg/L	07/12/23	BD	
Dibromomethane	Not Detected	5	µg/L	07/12/23	BD	
1,2-Dichlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
1,3-Dichlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
1,4-Dichlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
Dichlorodifluoromethane	Not Detected	5	µg/L	07/12/23	BD	
1,1-Dichloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,2-Dichloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,1-Dichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
cis-1,2-Dichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
trans-1,2-Dichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
1,2-Dichloropropane	Not Detected	1	µg/L	07/12/23	BD	
1,3-Dichloropropane	Not Detected	1	µg/L	07/12/23	BD	
2,2-Dichloropropane	Not Detected	1	µg/L	07/12/23	BD	
1,1-Dichloropropene	Not Detected	1	µg/L	07/12/23	BD	
1,3-Dichloropropene	Not Detected	1	µg/L	07/12/23	BD	
continued						

Sample Description:		Location C, 10:31, 07/11/23				
Laboratory ID:	13047-5	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
VOC's, Cont'd						
Ethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
Ethylene Dibromide (1,2-Dibromoethane)	Not Detected	0.2	µg/L	07/12/23	BD	
Hexachlorobutadiene	Not Detected	0.2	µg/L	07/12/23	BD	
2-Hexanone	Not Detected	50	µg/L	07/12/23	BD	
Isopropyl benzene	Not Detected	5	µg/L	07/12/23	BD	
4-Methyl-2-pentanone (MIBK)	Not Detected	50	µg/L	07/12/23	BD	
Methyl-t-butyl ether (MTBE)	Not Detected	5	µg/L	07/12/23	BD	
Methylene chloride	Not Detected	5	µg/L	07/12/23	BD	
2-Methylnaphthalene	Not Detected	5	µg/L	07/12/23	BD	
Naphthalene	Not Detected	5	µg/L	07/12/23	BD	
n-Propyl benzene	Not Detected	1	µg/L	07/12/23	BD	
Styrene	Not Detected	1	µg/L	07/12/23	BD	
1,1,1,2-Tetrachloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,1,2,2-Tetrachloroethane	Not Detected	1	µg/L	07/12/23	BD	
Tetrachloroethylene	Not Detected	1	µg/L	07/12/23	BD	
Tetrahydrofuran	Not Detected	90	µg/L	07/12/23	BD	
Toluene	Not Detected	1	µg/L	07/12/23	BD	
1,2,3-Trichlorobenzene	Not Detected	5	µg/L	07/12/23	BD	
1,2,4-Trichlorobenzene	Not Detected	5	µg/L	07/12/23	BD	
1,1,1-Trichloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,1,2-Trichloroethane	Not Detected	1	µg/L	07/12/23	BD	
Trichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
Trichlorofluoromethane	Not Detected	1	µg/L	07/12/23	BD	
1,2,3-Trichloropropane	Not Detected	1	µg/L	07/12/23	BD	
1,2,3-Trimethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
1,2,4-Trimethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
1,3,5-Trimethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
Vinyl Acetate	Not Detected	100	µg/L	07/12/23	BD	
Vinyl chloride	Not Detected	1	µg/L	07/12/23	BD	
Xylene (Total)	Not Detected	3	µg/L	07/12/23	BD	
Surrogate Standards						
1,2-Dichloroethane-d4	99.6%	-	% Recovery	07/12/23	BD	
Toluene-d8	109%	-	% Recovery	07/12/23	BD	
4-Bromofluorobenzene	102%	-	% Recovery	07/12/23	BD	
continued						

Sample Description:		Location C, 10:31, 07/11/23				
Laboratory ID:	13047-5	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Semi-Volatile Organic Cmpds			□			
Acenaphthene	Not Detected	5	µg/L	07/14/23	BD	
Acenaphthylene	Not Detected	5	µg/L	07/14/23	BD	
Aniline	Not Detected	4	µg/L	07/14/23	BD	
Anthracene	Not Detected	5	µg/L	07/14/23	BD	
Azobenzene	Not Detected	2	µg/L	07/14/23	BD	
Benzidine	Not Detected	2	µg/L	07/14/23	BD	
Benzo(a)anthracene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(b)fluoranthene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(k)fluoranthene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(g,h,i)perylene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(a)pyrene	Not Detected	1	µg/L	07/14/23	BD	
Benzyl alcohol	Not Detected	50	µg/L	07/14/23	BD	
Bis(2-chloroethyl)ether	Not Detected	1	µg/L	07/14/23	BD	
Bis(2-chloroisopropyl)ether	Not Detected	5	µg/L	07/14/23	BD	
Bis(2-chloroethoxy)methane	Not Detected	5	µg/L	07/14/23	BD	
Bis(2-ethylhexyl)phthalate	Not Detected	5	µg/L	07/14/23	BD	
4-Bromophenyl phenyl ether	Not Detected	5	µg/L	07/14/23	BD	
Butyl benzyl phthalate	Not Detected	5	µg/L	07/14/23	BD	
Carbazole	Not Detected	10	µg/L	07/14/23	BD	
4-Chloroaniline	Not Detected	10	µg/L	07/14/23	BD	
4-Chloro-3-methylphenol	Not Detected	5	µg/L	07/14/23	BD	
2-Chloronaphthalene (beta)	Not Detected	5	µg/L	07/14/23	BD	
2-Chlorophenol	Not Detected	10	µg/L	07/14/23	BD	
4-Chlorophenyl phenyl ether	Not Detected	5	µg/L	07/14/23	BD	
Chrysene	Not Detected	1	µg/L	07/14/23	BD	
Di-n-butylphthalate	Not Detected	5	µg/L	07/14/23	BD	
Di-n-octyl phthalate	Not Detected	5	µg/L	07/14/23	BD	
Dibenzo(a,h)anthracene	Not Detected	2	µg/L	07/14/23	BD	
Dibenzofuran	Not Detected	4	µg/L	07/14/23	BD	
3,3'-Dichlorobenzidine	Not Detected	2	µg/L	07/14/23	BD	
2,4-Dichlorophenol	Not Detected	10	µg/L	07/14/23	BD	
Diethylphthalate	Not Detected	5	µg/L	07/14/23	BD	
Dimethyl phthalate	Not Detected	5	µg/L	07/14/23	BD	
2,4-Dimethylphenol	Not Detected	5	µg/L	07/14/23	BD	
2,4-Dinitrophenol	Not Detected	25	µg/L	07/14/23	BD	
2,4-Dinitrotoluene	Not Detected	5	µg/L	07/14/23	BD	
2,6-Dinitrotoluene	Not Detected	5	µg/L	07/14/23	BD	
continued						

Sample Description:		Location C, 10:31, 07/11/23				
Laboratory ID:	13047-5	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
SVOC's, Cont'd			□			
Fluoranthene	Not Detected	1	µg/L	07/14/23	BD	
Fluorene	Not Detected	5	µg/L	07/14/23	BD	
Hexachlorobenzene	Not Detected	1	µg/L	07/14/23	BD	
Hexachlorocyclopentadiene	Not Detected	5	µg/L	07/14/23	BD	
Hexachloroethane	Not Detected	5	µg/L	07/14/23	BD	
Indeno(1,2,3-cd)pyrene	Not Detected	2	µg/L	07/14/23	BD	
Isophorone	Not Detected	5	µg/L	07/14/23	BD	
2-Methyl-4,6-Dinitrophenol	Not Detected	20	µg/L	07/14/23	BD	
2-Methylnaphthalene	Not Detected	5	µg/L	07/14/23	BD	
2-Methylphenol	Not Detected	10	µg/L	07/14/23	BD	
4-Methylphenol	Not Detected	10	µg/L	07/14/23	BD	
Methylphenols (total)	Not Detected	30	µg/L	07/14/23	BD	
Naphthalene	Not Detected	5	µg/L	07/14/23	BD	
2-Nitroaniline	Not Detected	25	µg/L	07/14/23	BD	
3-Nitroaniline	Not Detected	25	µg/L	07/14/23	BD	
4-Nitroaniline	Not Detected	25	µg/L	07/14/23	BD	
Nitrobenzene	Not Detected	3	µg/L	07/14/23	BD	
2-Nitrophenol	Not Detected	5	µg/L	07/14/23	BD	
4-Nitrophenol	Not Detected	25	µg/L	07/14/23	BD	
N-Nitrosodi-n-propylamine	Not Detected	5	µg/L	07/14/23	BD	
N-Nitrosodiphenylamine	Not Detected	5	µg/L	07/14/23	BD	
Pentachlorophenol	Not Detected	1	µg/L	07/14/23	BD	
Phenanthrene	Not Detected	2	µg/L	07/14/23	BD	
Phenol	Not Detected	5	µg/L	07/14/23	BD	
Pyrene	Not Detected	5	µg/L	07/14/23	BD	
Pyridine	Not Detected	20	µg/L	07/14/23	BD	
2,4,5-Trichlorophenol	Not Detected	5	µg/L	07/14/23	BD	
2,4,6-Trichlorophenol	Not Detected	4	µg/L	07/14/23	BD	
Surrogate Standards						
2-Fluorophenol	23.2%	-	% Recovery	07/14/23	BD	
Phenol-d5	19.8%	-	% Recovery	07/14/23	BD	
Nitrobenzene-d5	38.4%	-	% Recovery	07/14/23	BD	
2-Fluorobiphenyl	46.7%	-	% Recovery	07/14/23	BD	
2,4,6-Tribromophenol	39.7%	-	% Recovery	07/14/23	BD	
Terphenyl-d14	39.6%	-	% Recovery	07/14/23	BD	
continued						

Sample Description:		Location C, 10:31, 07/11/23				
Laboratory ID:	13047-5	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
PCBs						
Aroclor 1016	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1221	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1232	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1242	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1248	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1254	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1260	Not Detected	0.2	µg/L	07/13/23	DS	
Polychlorinated biphenyls (Total)	Not Detected	2	µg/L	07/13/23	DS	
Surrogate Standards						
Tetrachloro-m-xylene	55.3%	-	% Recovery	07/13/23	DS	
Decachlorobiphenyl	75.3%	-	% Recovery	07/13/23	DS	
Herbicides						
2,4-D	Not Detected	10	µg/L	07/18/23	DS	
2,4-DB	Not Detected	10	µg/L	07/18/23	DS	
2,4,5-TP (Silvex)	Not Detected	30	µg/L	07/18/23	DS	
2,4,5-T	Not Detected	10	µg/L	07/18/23	DS	
Dalapon	Not Detected	10	µg/L	07/18/23	DS	
Dicamba	Not Detected	1	µg/L	07/18/23	DS	
Dichloroprop	Not Detected	10	µg/L	07/18/23	DS	
Dinoseb	Not Detected	1	µg/L	07/18/23	DS	
MCPA	Not Detected	100	µg/L	07/18/23	DS	
MCPP	Not Detected	250	µg/L	07/18/23	DS	E, C
Surrogate Standards						
DCPAA	90.7%	-	% Recovery	07/18/23	DS	
continued						

Sample Description:		Location C, 10:31, 07/11/23					
Laboratory ID:	13047-5	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers	
Pesticides							
Aldrin	Not Detected	0.01	µg/L	07/14/23	DS	E, C	
Chlordane	Not Detected	0.05	µg/L	07/14/23	DS		
4,4'-DDD	Not Detected	0.1	µg/L	07/14/23	DS		
4,4'-DDE	Not Detected	0.1	µg/L	07/14/23	DS		
4,4'-DDT	Not Detected	0.06	µg/L	07/14/23	DS		
Dieldrin	Not Detected	0.02	µg/L	07/14/23	DS		
Endosulfan-alpha	Not Detected	0.015	µg/L	07/14/23	DS		
Endosulfan-beta	Not Detected	0.015	µg/L	07/14/23	DS		
Endosulfan (Total)	Not Detected	0.03	µg/L	07/14/23	DS		
Endosulfan sulfate	Not Detected	0.05	µg/L	07/14/23	DS		
Endrin	Not Detected	0.02	µg/L	07/14/23	DS		
Endrin aldehyde	Not Detected	0.02	µg/L	07/14/23	DS		
Heptachlor	Not Detected	0.01	µg/L	07/14/23	DS		
Heptachlor Epoxide	Not Detected	0.01	µg/L	07/14/23	DS		
alpha-Hexachlorocyclohexane	Not Detected	0.05	µg/L	07/14/23	DS		
beta-Hexachlorocyclohexane	Not Detected	0.02	µg/L	07/14/23	DS		
delta-Hexachlorocyclohexane	Not Detected	0.01	µg/L	07/14/23	DS		
Lindane	Not Detected	0.03	µg/L	07/14/23	DS		
Methoxychlor	Not Detected	0.5	µg/L	07/14/23	DS		
Toxaphene	Not Detected	1	µg/L	07/14/23	DS		
Surrogate Standards			□				
Tetrachloro-m-xylene	92.1%	-	% Recovery	07/14/23	DS		
Decachlorobiphenyl	106%	-	% Recovery	07/14/23	DS		
Metals							
Arsenic	Not Detected	5	µg/L	07/14/23	DS		
Barium	215	100	µg/L	07/14/23	DS		
Cadmium	Not Detected	1	µg/L	07/14/23	DS		
Chromium	Not Detected	5	µg/L	07/14/23	DS		
Hexavalent Chromium	Not Detected	10	µg/L	07/12/23	LB		
Copper	Not Detected	4	µg/L	07/14/23	DS		
Lead	Not Detected	3	µg/L	07/14/23	DS		
Mercury	Not Detected	0.2	µg/L	07/19/23	DS		
Selenium	Not Detected	5	µg/L	07/17/23	DS		
Silver	Not Detected	0.2	µg/L	07/14/23	DS		
Zinc	Not Detected	50	µg/L	07/14/23	DS		
continued							

Sample Description:	Location C, 10:31, 07/11/23					
Laboratory ID:	13047-5	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Analysis Information						
SVOC Extraction	Completed	-	-	07/14/23	LB	
PCB Extraction	Completed	-	-	07/13/23	LB	
Pesticide Extraction	Completed	-	-	07/13/23	LB	
Herbicide Extraction	Completed	-	-	07/17/23	LB	
Mercury Digestion	Completed	-	-	07/18/23	MR	
Metals Digestion	Completed	-	-	07/13/23	MR	

Sample Description:		Location C, 10:35, 07/11/23				
Laboratory ID:	13047-6	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
<i>Volatile Organic Compounds</i>						
Acetone	Not Detected	1,000	µg/Kg, dry wt.	07/12/23	BD	E, C
Benzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Bromobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromochloromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromodichloromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromoform	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromomethane	Not Detected	200	µg/Kg, dry wt.	07/12/23	BD	
2-Butanone (MEK)	Not Detected	750	µg/Kg, dry wt.	07/12/23	BD	
n-Butylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
sec-Butylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
tert-Butylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Carbon disulfide	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Carbon tetrachloride	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Chlorobenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Chloroethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Chloroform	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Chloromethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
2-Chlorotoluene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
4-Chlorotoluene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Dibromochloromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dibromo-3-chloropropane	Not Detected	10	µg/Kg, dry wt.	07/12/23	BD	
Dibromomethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dichlorobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,3-Dichlorobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,4-Dichlorobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Dichlorodifluoromethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,1-Dichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1-Dichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
cis-1,2-Dichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
trans-1,2-Dichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dichloropropane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,3-Dichloropropane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
2,2-Dichloropropane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1-Dichloropropene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,3-Dichloropropene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
continued						

Sample Description:		Location C, 10:35, 07/11/23				
Laboratory ID:	13047-6	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
VOC's, Cont'd						
Ethylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Ethylene Dibromide (1,2-Dibromoethane)	Not Detected	20	µg/Kg, dry wt.	07/12/23	BD	
Hexachlorobutadiene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
2-Hexanone	Not Detected	2,500	µg/Kg, dry wt.	07/12/23	BD	
Isopropyl benzene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
4-Methyl-2-pentanone (MIBK)	Not Detected	2,500	µg/Kg, dry wt.	07/12/23	BD	
Methyl-t-butyl ether (MTBE)	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Methylene chloride	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
2-Methylnaphthalene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Naphthalene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
n-Propylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Styrene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1,1,2-Tetrachloroethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,1,2,2-Tetrachloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Tetrachloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Tetrahydrofuran	Not Detected	1,000	µg/Kg, dry wt.	07/12/23	BD	
Toluene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,3-Trichlorobenzene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,2,4-Trichlorobenzene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,1,1-Trichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1,2-Trichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Trichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Trichlorofluoromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,3-Trichloropropane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,3-Trimethylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,4-Trimethylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,3,5-Trimethylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Vinyl Acetate	Not Detected	5,000	µg/Kg, dry wt.	07/12/23	BD	
Vinyl Chloride	Not Detected	40	µg/Kg, dry wt.	07/12/23	BD	
Xylene (Total)	Not Detected	150	µg/Kg, dry wt.	07/12/23	BD	
Surrogate Standards						
1,2-Dichloroethane-d4	100%	-	% Recovery	07/12/23	BD	
Toluene-d8	110%	-	% Recovery	07/12/23	BD	
4-Bromofluorobenzene	104%	-	% Recovery	07/12/23	BD	
continued						

Sample Description:		Location C, 10:35, 07/11/23				
Laboratory ID:	13047-6	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
<i>Semi-Volatile Organic Cmpds</i>						
Acenaphthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Acenaphthylene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Aniline	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Anthracene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Azobenzene	Not Detected	200	µg/Kg, dry wt.	07/14/23	BD	
Benzydine	Not Detected	1,000	µg/Kg, dry wt.	07/14/23	BD	
Benzo(a)anthracene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(b)fluoranthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(k)fluoranthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(g,h,i)perylene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(a)pyrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzyl alcohol	Not Detected	3,300	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-chloroethyl)ether	Not Detected	100	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-chloroisopropyl)ether	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-chloroethoxy)methane	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-ethylhexyl)phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Bromophenyl phenyl ether	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Butyl benzyl phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Carbazole	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Chloroaniline	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Chloro-3-methylphenol	Not Detected	280	µg/Kg, dry wt.	07/14/23	BD	
2-Chloronaphthalene (beta)	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Chlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Chlorophenyl phenyl ether	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Chrysene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Di-n-butylphthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Di-n-octyl phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Dibenzo(a,h)anthracene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Dibenzofuran	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
3,3'-Dichlorobenzidine	Not Detected	2,000	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dichlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Diethylphthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Dimethyl phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dimethylphenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dinitrophenol	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dinitrotoluene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,6-Dinitrotoluene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
continued						

Sample Description:		Location C, 10:35, 07/11/23				
Laboratory ID:	13047-6	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
SVOC's, Cont'd						
Fluoranthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Fluorene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Hexachlorobenzene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Hexachlorocyclopentadiene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Hexachloroethane	Not Detected	300	µg/Kg, dry wt.	07/14/23	BD	
Indeno(1,2,3-cd)pyrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Isophorone	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Methyl-4,6-Dinitrophenol	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
2-Methylnaphthalene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Methylphenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Methylphenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Methylphenols (total)	Not Detected	1,000	µg/Kg, dry wt.	07/14/23	BD	
Naphthalene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Nitroaniline	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
3-Nitroaniline	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
4-Nitroaniline	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
Nitrobenzene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Nitrophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Nitrophenol	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
N-Nitrosodi-n-propylamine	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
N-Nitrosodiphenylamine	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Pentachlorophenol	Not Detected	20	µg/Kg, dry wt.	07/14/23	BD	
Phenanthrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Phenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Pyrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Pyridine	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4,5-Trichlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4,6-Trichlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Surrogate Standards						
2-Fluorophenol	35.5%	-	% Recovery	07/14/23	BD	
Phenol-d5	37.6%	-	% Recovery	07/14/23	BD	
Nitrobenzene-d5	40.1%	-	% Recovery	07/14/23	BD	
2-Fluorobiphenyl	41.7%	-	% Recovery	07/14/23	BD	
2,4,6-Tribromophenol	46.7%	-	% Recovery	07/14/23	BD	
Terphenyl-d14	52.3%	-	% Recovery	07/14/23	BD	
continued						

Sample Description:		Location C, 10:35, 07/11/23				
Laboratory ID:	13047-6	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
PCBs						
Aroclor 1016	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1221	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1232	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1242	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1248	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1254	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1260	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Polychlorinated biphenyls (Total)	Not Detected	700	µg/Kg, dry wt.	07/13/23	DS	
Surrogate Standards						
Tetrachloro-m-xylene	67.5%	-	% Recovery	07/13/23	DS	
Decachlorobiphenyl	73.1%	-	% Recovery	07/13/23	DS	
Herbicides						
2,4-D	Not Detected	200	µg/Kg, dry wt.	07/18/23	DS	
2,4-DB	Not Detected	200	µg/Kg, dry wt.	07/18/23	DS	
2,4,5-TP (Silvex)	Not Detected	300	µg/Kg, dry wt.	07/18/23	DS	
2,4,5-T	Not Detected	500	µg/Kg, dry wt.	07/18/23	DS	
Dalapon	Not Detected	500	µg/Kg, dry wt.	07/18/23	DS	
Dicamba	Not Detected	50	µg/Kg, dry wt.	07/18/23	DS	
Dichloroprop	Not Detected	50	µg/Kg, dry wt.	07/18/23	DS	
Dinoseb	Not Detected	200	µg/Kg, dry wt.	07/18/23	DS	
MCPA	Not Detected	5,000	µg/Kg, dry wt.	07/18/23	DS	
MCPP	Not Detected	5,000	µg/Kg, dry wt.	07/18/23	DS	
Surrogate Standards						
DCPAA	101%	-	% Recovery	07/18/23	DS	
continued						

Sample Description:		Location C, 10:35, 07/11/23				
Laboratory ID:	13047-6	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Pesticides						
Aldrin	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Chlordane	Not Detected	30	µg/Kg, dry wt.	07/14/23	DS	
4,4'-DDD	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
4,4'-DDE	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
4,4'-DDT	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Dieldrin	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan-alpha	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan-beta	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan (Total)	Not Detected	40	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan sulfate	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endrin	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endrin aldehyde	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Heptachlor	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Heptachlor Epoxide	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
alpha-Hexachlorocyclohexane	Not Detected	10	µg/Kg, dry wt.	07/14/23	DS	
beta-Hexachlorocyclohexane	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
delta-Hexachlorocyclohexane	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Lindane	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Methoxychlor	Not Detected	50	µg/Kg, dry wt.	07/14/23	DS	
Toxaphene	Not Detected	170	µg/Kg, dry wt.	07/14/23	DS	
Surrogate Standards						
Tetrachloro-m-xylene	102%	-	% Recovery	07/14/23	DS	
Decachlorobiphenyl	97.3%	-	% Recovery	07/14/23	DS	
Metals						
Arsenic	2,140	100	µg/Kg, dry wt.	07/14/23	DS	
Barium	145,000	1,000	µg/Kg, dry wt.	07/14/23	DS	
Cadmium	Not Detected	200	µg/Kg, dry wt.	07/14/23	DS	
Chromium	12,300	2,000	µg/Kg, dry wt.	07/14/23	DS	
Hexavalent Chromium	Not Detected	2,000	µg/Kg, dry wt.	07/12/23	LB	
Copper	27,100	1,000	µg/Kg, dry wt.	07/14/23	DS	
Lead	23,800	1,000	µg/Kg, dry wt.	07/14/23	DS	
Mercury	Not Detected	50	µg/Kg, dry wt.	07/19/23	DS	
Selenium	Not Detected	200	µg/Kg, dry wt.	07/17/23	DS	
Silver	Not Detected	100	µg/Kg, dry wt.	07/14/23	DS	
Zinc	29,400	1,000	µg/Kg, dry wt.	07/14/23	DS	
continued						

Sample Description:	Location C, 10:35, 07/11/23					
Laboratory ID:	13047-6	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Analysis Information						
Dry Weight Solids	92.0%	-	% by weight	07/11/23	LB	
SVOC Extraction	Completed	-	-	07/14/23	LB	
PCB Extraction	Completed	-	-	07/13/23	LB	
Pesticide Extraction	Completed	-	-	07/13/23	LB	
Herbicide Extraction	Completed	-	-	07/18/23	LB	
Mercury Digestion	Completed	-	-	07/18/23	MR	
Metals Digestion	Completed	-	-	07/13/23	MR	

Sample Description:	Location A, 11:10, 07/11/23					
Laboratory ID:	13047-7	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
<i>Volatile Organic Compounds</i>						
Acetone	Not Detected	50	µg/L	07/12/23	BD	
Benzene	Not Detected	1	µg/L	07/12/23	BD	
Bromobenzene	Not Detected	1	µg/L	07/12/23	BD	
Bromochloromethane	Not Detected	1	µg/L	07/12/23	BD	
Bromodichloromethane	Not Detected	1	µg/L	07/12/23	BD	
Bromoform	Not Detected	1	µg/L	07/12/23	BD	
Bromomethane	Not Detected	5	µg/L	07/12/23	BD	
2-Butanone (MEK)	Not Detected	25	µg/L	07/12/23	BD	
n-Butylbenzene	Not Detected	1	µg/L	07/12/23	BD	
sec-Butylbenzene	Not Detected	1	µg/L	07/12/23	BD	
tert-Butylbenzene	Not Detected	1	µg/L	07/12/23	BD	
Carbon disulfide	Not Detected	5	µg/L	07/12/23	BD	
Carbon tetrachloride	Not Detected	1	µg/L	07/12/23	BD	
Chlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
Chloroethane	Not Detected	5	µg/L	07/12/23	BD	
Chloroform	Not Detected	1	µg/L	07/12/23	BD	
Chloromethane	Not Detected	5	µg/L	07/12/23	BD	
2-Chlorotoluene	Not Detected	5	µg/L	07/12/23	BD	
4-Chlorotoluene	Not Detected	5	µg/L	07/12/23	BD	
Dibromochloromethane	Not Detected	5	µg/L	07/12/23	BD	
1,2-Dibromo-3-chloropropane	Not Detected	0.2	µg/L	07/12/23	BD	
Dibromomethane	Not Detected	5	µg/L	07/12/23	BD	
1,2-Dichlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
1,3-Dichlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
1,4-Dichlorobenzene	Not Detected	1	µg/L	07/12/23	BD	
Dichlorodifluoromethane	Not Detected	5	µg/L	07/12/23	BD	
1,1-Dichloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,2-Dichloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,1-Dichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
cis-1,2-Dichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
trans-1,2-Dichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
1,2-Dichloropropane	Not Detected	1	µg/L	07/12/23	BD	
1,3-Dichloropropane	Not Detected	1	µg/L	07/12/23	BD	
2,2-Dichloropropane	Not Detected	1	µg/L	07/12/23	BD	
1,1-Dichloropropene	Not Detected	1	µg/L	07/12/23	BD	
1,3-Dichloropropene	Not Detected	1	µg/L	07/12/23	BD	
continued						

Sample Description:		Location A, 11:10, 07/11/23				
Laboratory ID:	13047-7	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
VOC's, Cont'd						
Ethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
Ethylene Dibromide (1,2-Dibromoethane)	Not Detected	0.2	µg/L	07/12/23	BD	
Hexachlorobutadiene	Not Detected	0.2	µg/L	07/12/23	BD	
2-Hexanone	Not Detected	50	µg/L	07/12/23	BD	
Isopropyl benzene	Not Detected	5	µg/L	07/12/23	BD	
4-Methyl-2-pentanone (MIBK)	Not Detected	50	µg/L	07/12/23	BD	
Methyl-t-butyl ether (MTBE)	Not Detected	5	µg/L	07/12/23	BD	
Methylene chloride	Not Detected	5	µg/L	07/12/23	BD	
2-Methylnaphthalene	Not Detected	5	µg/L	07/12/23	BD	
Naphthalene	Not Detected	5	µg/L	07/12/23	BD	
n-Propyl benzene	Not Detected	1	µg/L	07/12/23	BD	
Styrene	Not Detected	1	µg/L	07/12/23	BD	
1,1,1,2-Tetrachloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,1,2,2-Tetrachloroethane	Not Detected	1	µg/L	07/12/23	BD	
Tetrachloroethylene	Not Detected	1	µg/L	07/12/23	BD	
Tetrahydrofuran	Not Detected	90	µg/L	07/12/23	BD	
Toluene	Not Detected	1	µg/L	07/12/23	BD	
1,2,3-Trichlorobenzene	Not Detected	5	µg/L	07/12/23	BD	
1,2,4-Trichlorobenzene	Not Detected	5	µg/L	07/12/23	BD	
1,1,1-Trichloroethane	Not Detected	1	µg/L	07/12/23	BD	
1,1,2-Trichloroethane	Not Detected	1	µg/L	07/12/23	BD	
Trichloroethylene	Not Detected	1	µg/L	07/12/23	BD	
Trichlorofluoromethane	Not Detected	1	µg/L	07/12/23	BD	
1,2,3-Trichloropropane	Not Detected	1	µg/L	07/12/23	BD	
1,2,3-Trimethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
1,2,4-Trimethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
1,3,5-Trimethylbenzene	Not Detected	1	µg/L	07/12/23	BD	
Vinyl Acetate	Not Detected	100	µg/L	07/12/23	BD	
Vinyl chloride	Not Detected	1	µg/L	07/12/23	BD	
Xylene (Total)	Not Detected	3	µg/L	07/12/23	BD	
Surrogate Standards						
1,2-Dichloroethane-d4	97.2%	-	% Recovery	07/12/23	BD	
Toluene-d8	109%	-	% Recovery	07/12/23	BD	
4-Bromofluorobenzene	103%	-	% Recovery	07/12/23	BD	
continued						

Sample Description:		Location A, 11:10, 07/11/23				
Laboratory ID:	13047-7	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Semi-Volatile Organic Cmpds			□			
Acenaphthene	Not Detected	5	µg/L	07/14/23	BD	
Acenaphthylene	Not Detected	5	µg/L	07/14/23	BD	
Aniline	Not Detected	4	µg/L	07/14/23	BD	
Anthracene	Not Detected	5	µg/L	07/14/23	BD	
Azobenzene	Not Detected	2	µg/L	07/14/23	BD	
Benzydine	Not Detected	2	µg/L	07/14/23	BD	
Benzo(a)anthracene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(b)fluoranthene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(k)fluoranthene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(g,h,i)perylene	Not Detected	1	µg/L	07/14/23	BD	
Benzo(a)pyrene	Not Detected	1	µg/L	07/14/23	BD	
Benzyl alcohol	Not Detected	50	µg/L	07/14/23	BD	
Bis(2-chloroethyl)ether	Not Detected	1	µg/L	07/14/23	BD	
Bis(2-chloroisopropyl)ether	Not Detected	5	µg/L	07/14/23	BD	
Bis(2-chloroethoxy)methane	Not Detected	5	µg/L	07/14/23	BD	
Bis(2-ethylhexyl)phthalate	Not Detected	5	µg/L	07/14/23	BD	
4-Bromophenyl phenyl ether	Not Detected	5	µg/L	07/14/23	BD	
Butyl benzyl phthalate	Not Detected	5	µg/L	07/14/23	BD	
Carbazole	Not Detected	10	µg/L	07/14/23	BD	
4-Chloroaniline	Not Detected	10	µg/L	07/14/23	BD	
4-Chloro-3-methylphenol	Not Detected	5	µg/L	07/14/23	BD	
2-Chloronaphthalene (beta)	Not Detected	5	µg/L	07/14/23	BD	
2-Chlorophenol	Not Detected	10	µg/L	07/14/23	BD	
4-Chlorophenyl phenyl ether	Not Detected	5	µg/L	07/14/23	BD	
Chrysene	Not Detected	1	µg/L	07/14/23	BD	
Di-n-butylphthalate	Not Detected	5	µg/L	07/14/23	BD	
Di-n-octyl phthalate	Not Detected	5	µg/L	07/14/23	BD	
Dibenzo(a,h)anthracene	Not Detected	2	µg/L	07/14/23	BD	
Dibenzofuran	Not Detected	4	µg/L	07/14/23	BD	
3,3'-Dichlorobenzidine	Not Detected	2	µg/L	07/14/23	BD	
2,4-Dichlorophenol	Not Detected	10	µg/L	07/14/23	BD	
Diethylphthalate	Not Detected	5	µg/L	07/14/23	BD	
Dimethyl phthalate	Not Detected	5	µg/L	07/14/23	BD	
2,4-Dimethylphenol	Not Detected	5	µg/L	07/14/23	BD	
2,4-Dinitrophenol	Not Detected	25	µg/L	07/14/23	BD	
2,4-Dinitrotoluene	Not Detected	5	µg/L	07/14/23	BD	
2,6-Dinitrotoluene	Not Detected	5	µg/L	07/14/23	BD	
continued						

Sample Description:		Location A, 11:10, 07/11/23				
Laboratory ID:	13047-7	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
SVOC's, Cont'd			□			
Fluoranthene	Not Detected	1	µg/L	07/14/23	BD	
Fluorene	Not Detected	5	µg/L	07/14/23	BD	
Hexachlorobenzene	Not Detected	1	µg/L	07/14/23	BD	
Hexachlorocyclopentadiene	Not Detected	5	µg/L	07/14/23	BD	
Hexachloroethane	Not Detected	5	µg/L	07/14/23	BD	
Indeno(1,2,3-cd)pyrene	Not Detected	2	µg/L	07/14/23	BD	
Isophorone	Not Detected	5	µg/L	07/14/23	BD	
2-Methyl-4,6-Dinitrophenol	Not Detected	20	µg/L	07/14/23	BD	
2-Methylnaphthalene	Not Detected	5	µg/L	07/14/23	BD	
2-Methylphenol	Not Detected	10	µg/L	07/14/23	BD	
4-Methylphenol	Not Detected	10	µg/L	07/14/23	BD	
Methylphenols (total)	Not Detected	30	µg/L	07/14/23	BD	
Naphthalene	Not Detected	5	µg/L	07/14/23	BD	
2-Nitroaniline	Not Detected	25	µg/L	07/14/23	BD	
3-Nitroaniline	Not Detected	25	µg/L	07/14/23	BD	
4-Nitroaniline	Not Detected	25	µg/L	07/14/23	BD	
Nitrobenzene	Not Detected	3	µg/L	07/14/23	BD	
2-Nitrophenol	Not Detected	5	µg/L	07/14/23	BD	
4-Nitrophenol	Not Detected	25	µg/L	07/14/23	BD	
N-Nitrosodi-n-propylamine	Not Detected	5	µg/L	07/14/23	BD	
N-Nitrosodiphenylamine	Not Detected	5	µg/L	07/14/23	BD	
Pentachlorophenol	Not Detected	1	µg/L	07/14/23	BD	
Phenanthrene	Not Detected	2	µg/L	07/14/23	BD	
Phenol	Not Detected	5	µg/L	07/14/23	BD	
Pyrene	Not Detected	5	µg/L	07/14/23	BD	
Pyridine	Not Detected	20	µg/L	07/14/23	BD	
2,4,5-Trichlorophenol	Not Detected	5	µg/L	07/14/23	BD	
2,4,6-Trichlorophenol	Not Detected	4	µg/L	07/14/23	BD	
Surrogate Standards						
2-Fluorophenol	26.9%	-	% Recovery	07/14/23	BD	
Phenol-d5	23.0%	-	% Recovery	07/14/23	BD	
Nitrobenzene-d5	50.3%	-	% Recovery	07/14/23	BD	
2-Fluorobiphenyl	64.5%	-	% Recovery	07/14/23	BD	
2,4,6-Tribromophenol	44.7%	-	% Recovery	07/14/23	BD	
Terphenyl-d14	48.4%	-	% Recovery	07/14/23	BD	
continued						

Sample Description:		Location A, 11:10, 07/11/23				
Laboratory ID:	13047-7	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
PCBs						
Aroclor 1016	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1221	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1232	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1242	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1248	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1254	Not Detected	0.2	µg/L	07/13/23	DS	
Aroclor 1260	Not Detected	0.2	µg/L	07/13/23	DS	
Polychlorinated biphenyls (Total)	Not Detected	2	µg/L	07/13/23	DS	
Surrogate Standards						
Tetrachloro-m-xylene	60.2%	-	% Recovery	07/13/23	DS	
Decachlorobiphenyl	83.9%	-	% Recovery	07/13/23	DS	
Herbicides						
2,4-D	Not Detected	10	µg/L	07/18/23	DS	
2,4-DB	Not Detected	10	µg/L	07/18/23	DS	
2,4,5-TP (Silvex)	Not Detected	30	µg/L	07/18/23	DS	
2,4,5-T	Not Detected	10	µg/L	07/18/23	DS	
Dalapon	Not Detected	10	µg/L	07/18/23	DS	
Dicamba	Not Detected	1	µg/L	07/18/23	DS	
Dichloroprop	Not Detected	10	µg/L	07/18/23	DS	
Dinoseb	Not Detected	1	µg/L	07/18/23	DS	
MCPA	Not Detected	100	µg/L	07/18/23	DS	
MCPP	Not Detected	250	µg/L	07/18/23	DS	E, C
Surrogate Standards						
DCPAA	92.4%	-	% Recovery	07/18/23	DS	
continued						

Sample Description:		Location A, 11:10, 07/11/23					
Laboratory ID:	13047-7	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers	
Pesticides							
Aldrin	Not Detected	0.01	µg/L	07/14/23	DS	E, C	
Chlordane	Not Detected	0.05	µg/L	07/14/23	DS		
4,4'-DDD	Not Detected	0.1	µg/L	07/14/23	DS		
4,4'-DDE	Not Detected	0.1	µg/L	07/14/23	DS		
4,4'-DDT	Not Detected	0.06	µg/L	07/14/23	DS		
Dieldrin	Not Detected	0.02	µg/L	07/14/23	DS		
Endosulfan-alpha	Not Detected	0.015	µg/L	07/14/23	DS		
Endosulfan-beta	Not Detected	0.015	µg/L	07/14/23	DS		
Endosulfan (Total)	Not Detected	0.03	µg/L	07/14/23	DS		
Endosulfan sulfate	Not Detected	0.05	µg/L	07/14/23	DS		
Endrin	Not Detected	0.02	µg/L	07/14/23	DS		
Endrin aldehyde	Not Detected	0.02	µg/L	07/14/23	DS		
Heptachlor	Not Detected	0.01	µg/L	07/14/23	DS		
Heptachlor Epoxide	Not Detected	0.01	µg/L	07/14/23	DS		
alpha-Hexachlorocyclohexane	Not Detected	0.05	µg/L	07/14/23	DS		
beta-Hexachlorocyclohexane	Not Detected	0.02	µg/L	07/14/23	DS		
delta-Hexachlorocyclohexane	Not Detected	0.01	µg/L	07/14/23	DS		
Lindane	Not Detected	0.03	µg/L	07/14/23	DS		
Methoxychlor	Not Detected	0.5	µg/L	07/14/23	DS		
Toxaphene	Not Detected	1	µg/L	07/14/23	DS		
Surrogate Standards			□				
Tetrachloro-m-xylene	93.6%	-	% Recovery	07/14/23	DS		
Decachlorobiphenyl	108%	-	% Recovery	07/14/23	DS		
Metals							
Arsenic	Not Detected	5	µg/L	07/14/23	DS		
Barium	113	100	µg/L	07/14/23	DS		
Cadmium	Not Detected	1	µg/L	07/14/23	DS		
Chromium	Not Detected	5	µg/L	07/14/23	DS		
Hexavalent Chromium	Not Detected	10	µg/L	07/12/23	LB		
Copper	Not Detected	4	µg/L	07/14/23	DS		
Lead	Not Detected	3	µg/L	07/14/23	DS		
Mercury	Not Detected	0.2	µg/L	07/19/23	DS		
Selenium	Not Detected	5	µg/L	07/17/23	DS		
Silver	Not Detected	0.2	µg/L	07/14/23	DS		
Zinc	Not Detected	50	µg/L	07/14/23	DS		
continued							

Sample Description:	Location A, 11:10, 07/11/23					
Laboratory ID:	13047-7	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Analysis Information						
SVOC Extraction	Completed	-	-	07/14/23	LB	
PCB Extraction	Completed	-	-	07/13/23	LB	
Pesticide Extraction	Completed	-	-	07/13/23	LB	
Herbicide Extraction	Completed	-	-	07/17/23	LB	
Mercury Digestion	Completed	-	-	07/18/23	MR	
Metals Digestion	Completed	-	-	07/13/23	MR	

Sample Description:		Location A, 11:15, 07/11/23				
Laboratory ID:	13047-8	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
<i>Volatile Organic Compounds</i>						
Acetone	Not Detected	1,000	µg/Kg, dry wt.	07/12/23	BD	E, C
Benzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Bromobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromochloromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromodichloromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromoform	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Bromomethane	Not Detected	200	µg/Kg, dry wt.	07/12/23	BD	
2-Butanone (MEK)	Not Detected	750	µg/Kg, dry wt.	07/12/23	BD	
n-Butylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
sec-Butylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
tert-Butylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Carbon disulfide	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Carbon tetrachloride	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Chlorobenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Chloroethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Chloroform	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Chloromethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
2-Chlorotoluene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
4-Chlorotoluene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Dibromochloromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dibromo-3-chloropropane	Not Detected	10	µg/Kg, dry wt.	07/12/23	BD	
Dibromomethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dichlorobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,3-Dichlorobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,4-Dichlorobenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Dichlorodifluoromethane	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,1-Dichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1-Dichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
cis-1,2-Dichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
trans-1,2-Dichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,2-Dichloropropane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,3-Dichloropropane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
2,2-Dichloropropane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1-Dichloropropene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,3-Dichloropropene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
continued						

Sample Description:		Location A, 11:15, 07/11/23				
Laboratory ID:	13047-8	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
VOC's, Cont'd						
Ethylbenzene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Ethylene Dibromide (1,2-Dibromoethane)	Not Detected	20	µg/Kg, dry wt.	07/12/23	BD	
Hexachlorobutadiene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
2-Hexanone	Not Detected	2,500	µg/Kg, dry wt.	07/12/23	BD	
Isopropyl benzene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
4-Methyl-2-pentanone (MIBK)	Not Detected	2,500	µg/Kg, dry wt.	07/12/23	BD	
Methyl-t-butyl ether (MTBE)	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Methylene chloride	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
2-Methylnaphthalene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
Naphthalene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
n-Propylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Styrene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1,1,2-Tetrachloroethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,1,2,2-Tetrachloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Tetrachloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Tetrahydrofuran	Not Detected	1,000	µg/Kg, dry wt.	07/12/23	BD	
Toluene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,3-Trichlorobenzene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,2,4-Trichlorobenzene	Not Detected	250	µg/Kg, dry wt.	07/12/23	BD	
1,1,1-Trichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
1,1,2-Trichloroethane	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Trichloroethylene	Not Detected	50	µg/Kg, dry wt.	07/12/23	BD	
Trichlorofluoromethane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,3-Trichloropropane	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,3-Trimethylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,2,4-Trimethylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
1,3,5-Trimethylbenzene	Not Detected	100	µg/Kg, dry wt.	07/12/23	BD	
Vinyl Acetate	Not Detected	5,000	µg/Kg, dry wt.	07/12/23	BD	
Vinyl Chloride	Not Detected	40	µg/Kg, dry wt.	07/12/23	BD	
Xylene (Total)	Not Detected	150	µg/Kg, dry wt.	07/12/23	BD	
Surrogate Standards						
1,2-Dichloroethane-d4	101%	-	% Recovery	07/12/23	BD	
Toluene-d8	109%	-	% Recovery	07/12/23	BD	
4-Bromofluorobenzene	103%	-	% Recovery	07/12/23	BD	
continued						

Sample Description:		Location A, 11:15, 07/11/23				
Laboratory ID:	13047-8	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
<i>Semi-Volatile Organic Cmpds</i>						
Acenaphthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Acenaphthylene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Aniline	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Anthracene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Azobenzene	Not Detected	200	µg/Kg, dry wt.	07/14/23	BD	
Benzydine	Not Detected	1,000	µg/Kg, dry wt.	07/14/23	BD	
Benzo(a)anthracene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(b)fluoranthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(k)fluoranthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(g,h,i)perylene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzo(a)pyrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Benzyl alcohol	Not Detected	3,300	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-chloroethyl)ether	Not Detected	100	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-chloroisopropyl)ether	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-chloroethoxy)methane	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Bis(2-ethylhexyl)phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Bromophenyl phenyl ether	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Butyl benzyl phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Carbazole	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Chloroaniline	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Chloro-3-methylphenol	Not Detected	280	µg/Kg, dry wt.	07/14/23	BD	
2-Chloronaphthalene (beta)	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Chlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Chlorophenyl phenyl ether	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Chrysene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Di-n-butylphthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Di-n-octyl phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Dibenzo(a,h)anthracene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Dibenzofuran	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
3,3'-Dichlorobenzidine	Not Detected	2,000	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dichlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Diethylphthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Dimethyl phthalate	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dimethylphenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dinitrophenol	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
2,4-Dinitrotoluene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,6-Dinitrotoluene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
continued						

Sample Description:		Location A, 11:15, 07/11/23				
Laboratory ID:	13047-8	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
SVOC's, Cont'd						
Fluoranthene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Fluorene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Hexachlorobenzene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Hexachlorocyclopentadiene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Hexachloroethane	Not Detected	300	µg/Kg, dry wt.	07/14/23	BD	
Indeno(1,2,3-cd)pyrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Isophorone	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Methyl-4,6-Dinitrophenol	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
2-Methylnaphthalene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Methylphenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Methylphenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Methylphenols (total)	Not Detected	1,000	µg/Kg, dry wt.	07/14/23	BD	
Naphthalene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Nitroaniline	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
3-Nitroaniline	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
4-Nitroaniline	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
Nitrobenzene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2-Nitrophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
4-Nitrophenol	Not Detected	830	µg/Kg, dry wt.	07/14/23	BD	
N-Nitrosodi-n-propylamine	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
N-Nitrosodiphenylamine	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Pentachlorophenol	Not Detected	20	µg/Kg, dry wt.	07/14/23	BD	
Phenanthrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Phenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Pyrene	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Pyridine	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4,5-Trichlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
2,4,6-Trichlorophenol	Not Detected	330	µg/Kg, dry wt.	07/14/23	BD	
Surrogate Standards						
2-Fluorophenol	42.9%	-	% Recovery	07/14/23	BD	
Phenol-d5	44.7%	-	% Recovery	07/14/23	BD	
Nitrobenzene-d5	48.9%	-	% Recovery	07/14/23	BD	
2-Fluorobiphenyl	49.2%	-	% Recovery	07/14/23	BD	
2,4,6-Tribromophenol	51.0%	-	% Recovery	07/14/23	BD	
Terphenyl-d14	55.5%	-	% Recovery	07/14/23	BD	
continued						

Sample Description:		Location A, 11:15, 07/11/23				
Laboratory ID:	13047-8	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
PCBs						
Aroclor 1016	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1221	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1232	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1242	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1248	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1254	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Aroclor 1260	Not Detected	100	µg/Kg, dry wt.	07/13/23	DS	
Polychlorinated biphenyls (Total)	Not Detected	700	µg/Kg, dry wt.	07/13/23	DS	
Surrogate Standards						
Tetrachloro-m-xylene	62.3%	-	% Recovery	07/13/23	DS	
Decachlorobiphenyl	73.4%	-	% Recovery	07/13/23	DS	
Herbicides						
2,4-D	Not Detected	200	µg/Kg, dry wt.	07/18/23	DS	
2,4-DB	Not Detected	200	µg/Kg, dry wt.	07/18/23	DS	
2,4,5-TP (Silvex)	Not Detected	300	µg/Kg, dry wt.	07/18/23	DS	
2,4,5-T	Not Detected	500	µg/Kg, dry wt.	07/18/23	DS	
Dalapon	Not Detected	500	µg/Kg, dry wt.	07/18/23	DS	
Dicamba	Not Detected	50	µg/Kg, dry wt.	07/18/23	DS	
Dichloroprop	Not Detected	50	µg/Kg, dry wt.	07/18/23	DS	
Dinoseb	Not Detected	200	µg/Kg, dry wt.	07/18/23	DS	
MCPA	Not Detected	5,000	µg/Kg, dry wt.	07/18/23	DS	
MCPP	Not Detected	5,000	µg/Kg, dry wt.	07/18/23	DS	
Surrogate Standards						
DCPAA	113%	-	% Recovery	07/18/23	DS	
continued						

Sample Description:		Location A, 11:15, 07/11/23				
Laboratory ID:	13047-8	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Pesticides						
Aldrin	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Chlordane	Not Detected	30	µg/Kg, dry wt.	07/14/23	DS	
4,4'-DDD	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
4,4'-DDE	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
4,4'-DDT	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Dieldrin	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan-alpha	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan-beta	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan (Total)	Not Detected	40	µg/Kg, dry wt.	07/14/23	DS	
Endosulfan sulfate	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endrin	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Endrin aldehyde	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Heptachlor	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Heptachlor Epoxide	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
alpha-Hexachlorocyclohexane	Not Detected	10	µg/Kg, dry wt.	07/14/23	DS	
beta-Hexachlorocyclohexane	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
delta-Hexachlorocyclohexane	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Lindane	Not Detected	20	µg/Kg, dry wt.	07/14/23	DS	
Methoxychlor	Not Detected	50	µg/Kg, dry wt.	07/14/23	DS	
Toxaphene	Not Detected	170	µg/Kg, dry wt.	07/14/23	DS	
Surrogate Standards						
Tetrachloro-m-xylene	99.8%	-	% Recovery	07/14/23	DS	
Decachlorobiphenyl	92.2%	-	% Recovery	07/14/23	DS	
Metals						
Arsenic	3,090	100	µg/Kg, dry wt.	07/14/23	DS	
Barium	180,000	1,000	µg/Kg, dry wt.	07/14/23	DS	
Cadmium	283	200	µg/Kg, dry wt.	07/14/23	DS	
Chromium	20,900	2,000	µg/Kg, dry wt.	07/14/23	DS	
Hexavalent Chromium	Not Detected	2,000	µg/Kg, dry wt.	07/12/23	LB	
Copper	18,100	1,000	µg/Kg, dry wt.	07/14/23	DS	
Lead	14,600	1,000	µg/Kg, dry wt.	07/14/23	DS	
Mercury	Not Detected	50	µg/Kg, dry wt.	07/19/23	DS	
Selenium	Not Detected	200	µg/Kg, dry wt.	07/17/23	DS	
Silver	Not Detected	100	µg/Kg, dry wt.	07/14/23	DS	
Zinc	65,600	1,000	µg/Kg, dry wt.	07/14/23	DS	
continued						

Sample Description:	Location A, 11:15, 07/11/23					
Laboratory ID:	13047-8	Reporting Limit	Units of Measure	Date of Analysis	Analyst	Data Qualifiers
Analysis Information						
Dry Weight Solids	53.0%	-	% by weight	07/11/23	LB	
SVOC Extraction	Completed	-	-	07/14/23	LB	
PCB Extraction	Completed	-	-	07/13/23	LB	
Pesticide Extraction	Completed	-	-	07/13/23	LB	
Herbicide Extraction	Completed	-	-	07/18/23	LB	
Mercury Digestion	Completed	-	-	07/18/23	MR	
Metals Digestion	Completed	-	-	07/13/23	MR	

Quality Control

VOC Matrix Spike Data

Spiked Sample: 13045-1		Matrix: Soil		Units: ppb in extract				
Parameter	Sample Result	Spike Added	MS Result	MSD Result	MS % Rec.	MSD % Rec.	RPD	Data Qualifiers
1,1-Dichloroethene	0.0	25	27	27	108	108	0.0	
Benzene	0.0	25	26	26	104	104	0.0	
Trichloroethene	0.0	25	24	25	96	100	4.1	
Toluene	0.0	25	24	25	96	100	4.1	
Chlorobenzene	0.0	25	21	22	84	88	4.7	

Spiked Sample: 13051 LCS		Matrix: Water		Units: ppb in solution				
Parameter	Sample Result	Spike Added	MS Result	MSD Result	MS % Rec.	MSD % Rec.	RPD	Data Qualifiers
1,1-Dichloroethene	0.0	25	28	29	112	116	3.5	
Benzene	0.0	25	24	26	96	104	8.0	
Trichloroethene	0.0	25	22	24	88	96	8.7	
Toluene	0.0	25	22	24	88	96	8.7	
Chlorobenzene	0.0	25	20	22	80	88	9.5	

SVOC Matrix Spike Data

Spiked Sample: 13047-8		Matrix: Soil		Units: ppm in extract				
Parameter	Sample Result	Spike Added	MS Result	MSD Result	MS % Rec.	MSD % Rec.	RPD	Data Qualifiers
2-Chlorophenol	0.0	100	57	53	57	53	7.3	
1,4-Dichlorobenzene	0.0	50	25	23	50	46	8.3	
1,2,4-Trichlorobenzene	0.0	50	23	21	46	42	9.1	
4-Chloro-3-methylphenol	0.0	100	56	50	56	50	11.3	
Acenaphthene	0.0	50	26	24	52	48	8.0	
Pentachlorophenol	0.0	100	68	66	68	66	3.0	

Spiked Sample: 13047 LCS		Matrix: Water		Units: ppm in extract				
Parameter	Sample Result	Spike Added	MS Result	MSD Result	MS % Rec.	MSD % Rec.	RPD	Data Qualifiers
2-Chlorophenol	0.0	100	51	44	51	44	14.7	
1,4-Dichlorobenzene	0.0	50	22	19	44	38	14.6	
1,2,4-Trichlorobenzene	0.0	50	20	21	40	42	4.9	
4-Chloro-3-methylphenol	0.0	100	53	54	53	54	1.9	
Acenaphthene	0.0	50	24	24	48	48	0.0	
Pentachlorophenol	0.0	100	69	70	69	70	1.4	

Quality Control, Cont'd

Metals Matrix Spike Data

Spiked Sample: 13047-2 (LCS for Ba, 13034-4 for Hex Cr, 13047-4 for Hg)					Matrix: Soil		Units: ppb in solution	
Parameter	Sample Result	Spike Added	MS Result	MSD Result	MS % Rec.	MSD % Rec.	RPD	Data Qualifiers
Arsenic	7.1	12.5	24.8	19.7	142	101	22.7	S, R, M
Barium	0	100	127	111	127	111	13.8	
Cadmium	0.2	1.3	1.3	1.3	91	92	1.0	
Chromium	8.5	10	22.7	24.9	142	163	9.0	
Cr, Hexavalent	0.0	500	320	320	64	64	0.0	
Copper	16.2	25	34.3	31.3	72	60	9.1	
Lead	9.4	25	33.9	35.5	98	104	4.5	
Mercury	0.0	5.0	5.3	5.2	107	104	2.7	
Selenium	0.0	25	6.3	7.2	25	29	13.3	
Silver	0.0	5.0	4.9	5.2	97	103	5.8	
Zinc	0.0	500	250	228	50	46	9.2	

Spiked Sample: 13047-5 (LCS for Hex Cr, Hg)					Matrix: Water		Units: ppb in solution	
Parameter	Sample Result	Spike Added	MS Result	MSD Result	MS % Rec.	MSD % Rec.	RPD	Data Qualifiers
Arsenic	1.3	12.5	17.7	15.3	131	112	14.3	
Barium	215	100	518	509	303	294	1.8	
Cadmium	0.0	1.3	1.3	1.1	104	86	18.4	
Chromium	0.0	10	11.8	10.6	118	106	11.2	
Cr, Hexavalent	0.0	500	510	520	102	104	1.9	
Copper	2.0	25	31.5	27.8	118	103	12.5	
Lead	0.0	25	25.2	23.0	101	92	9.3	
Mercury	0.0	5.0	4.7	4.6	93	92	1.3	
Selenium	0.0	25	12.6	10.8	50	43	15.4	
Silver	0.0	5.0	2.5	2.6	50	52	2.4	
Zinc	0.0	500	179	170	36	34	5.2	

PCB Matrix Spike Data

Spiked Sample: 13045-1		Matrix: Soil		Units: ppm in extract				
Parameter	Sample Result	Spike Added	MS Result	MSD Result	MS % Rec.	MSD % Rec.	RPD	Data Qualifiers
Aroclor 1260	0.000	0.200	0.242	0.232	121	116	4.0	

Spiked Sample: 13047 LCS		Matrix: Water		Units: ppm in extract				
Parameter	Sample Result	Spike Added	MS Result	MSD Result	MS % Rec.	MSD % Rec.	RPD	Data Qualifiers
Aroclor 1260	0.000	0.200	0.208	0.203	104	101	2.4	

Quality Control, Cont'd

Pesticides Matrix Spike Data

Spiked Sample: 13047-2		Matrix: Soil		Units: ppb in extract				
Parameter	Sample Result	Spike Added	MS Result	MSD Result	MS % Rec.	MSD % Rec.	RPD	Data Qualifiers
BHC-alpha	0.0	50	41.9	53.3	84	107	23.9	
BHC-beta	0.0	50	42.3	54.8	85	110	25.7	
Dieldrin	0.0	50	45.5	55.5	91	111	19.8	
Endosulfan I	0.0	50	44.5	52.7	89	105	16.9	
4,4'-DDD	0.0	50	45.9	54.4	92	109	16.9	

Spiked Sample: 13047 LCS		Matrix: Water		Units: ppb in extract				
Parameter	Sample Result	Spike Added	MS Result	MSD Result	MS % Rec.	MSD % Rec.	RPD	Data Qualifiers
BHC-alpha	0.0	50	47.6	55.1	95	110	14.6	
BHC-beta	0.0	50	44.4	49.9	89	100	11.7	
Dieldrin	0.0	50	46.6	53.2	93	106	13.2	
Endosulfan I	0.0	50	46.9	53.3	94	107	12.8	
4,4'-DDD	0.0	50	42.9	53.2	86	106	21.4	

Herbicides Matrix Spike Data

Spiked Sample: 13047-6		Matrix: Soil		Units: ppb in solution				
Parameter	Sample Result	Spike Added	MS Result	MSD Result	MS % Rec.	MSD % Rec.	RPD	Data Qualifiers
2,4-DB	0.0	250	224	225	90	90	0.4	
Dicamba	0.0	25	24.3	25.6	97	102	5.2	
Silvex	0.0	25	24.9	23.4	100	94	6.2	

Spiked Sample: 13047 LCS		Matrix: Water		Units: ppb in solution				
Parameter	Sample Result	Spike Added	MS Result	MSD Result	MS % Rec.	MSD % Rec.	RPD	Data Qualifiers
2,4-DB	0.0	250	94	129	37	52	31.9	
Dicamba	0.0	25	13.5	16.7	54	67	21.2	
Silvex	0.0	25	16.9	19.1	68	76	12.2	

Case Narrative

The reporting limit for MCPP for Herbicides in Water was elevated due to the presence of the analyte in the associated method blank.

The reporting limit for 4,4'-DDT for Pesticides in Water was elevated due to the presence of the analyte in the associated method blank.

The reporting limit for Chloroform in Soil was elevated due to the presence of the analyte in the associated method blank.

Samples 12856-1, 3, 5 and 7 were filtered with a 0.45 μ m filter prior to digestion and analysis of metals per client's request.

All method protocols and quality control requirements were satisfied for all samples.

Notes

- (1) Quality Control Limits available upon request.
- (2) Results are applicable only to the sample tested.
- (3) All samples will be discarded after 30 days unless the laboratory receives other instructions.
- (4) Chain of Custody document attached.

QUANTUM LABORATORIES, INC.



David W. Starr
Analytical Chemistry Manager

QUANTUM LABORATORIES, INC.
28221 Beck Road | Suite A-11
Wixom, MI 48393
248-348-TEST or 248-348-8378

Women's Business Enterprise
National Council



Cert. No. 2005111505



CHAIN OF CUSTODY RECORD

CLIENT INFO	
COMPANY	AKT Perkless
ADDRESS	
CITY, STATE, ZIP	
TELEPHONE	
FAX	
CONTACT	Brian Westhoff
ADDITIONAL PHONE	
EMAIL ADDRESS	westhoffb@aktperkless.com

* SAMPLE TYPE: S=Soil, W=Water, D=Drinking Water, O=Oil/Organic, M=Mixed, V=Vapor, A=Air
U=Unknown or Other

** GRAB/COMP: G=Grab Sample, C=Composite Sample

PROJECT INFO		ANALYSIS REQUESTED		SPECIAL INSTRUCTIONS		TURN AROUND TIME		SAMPLES COLLECTED BY		SAMPLING LOCATION		PROJECT NAME		PROJECT NUMBER		P.O. NUMBER		REPORT NO. (LAB USE)		Page 1 of 2	
		VOCs SVOCs PCBs Herbicides Pesticides Hex Chlorm Michigan 10 Metals						Thomas Cisnevsky		Galloway Creek		13038f-4-20		13047							

LINE NO.	LAB USE	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	TIME SAMPLED	DATE SAMPLED	SAMPLE TYPE *	GRAB / COMP **	REMARKS / PRESERVATIVES
1		Location D	4	9:20	7/11/23	W	G	
2		Location D	2	9:25	7/11/23	S	G	
3		Location B	4	9:57	7/11/23	W	G	
4		Location B	2	10:04	7/11/23	S	G	
5		Location C	4	10:31	7/11/23	W	G	
6		Location C	2	10:35	7/11/23	S	G	
7		Location A	4	11:10	7/11/23	W	G	
8		Location A	2	11:15	7/11/23	S	G	
9								
10								

RELINQUISHED BY	TIME / DATE	ACCEPTED BY	SAMPLE RECEIVED
	1215 7/11/23		☐ Wet Ice ☐ Blue Ice

Distribution: White - Lab Copy Yellow - Client Report Pink - Sampler